

C42.6/2: J27

A UNITED STATES  
DEPARTMENT OF  
COMMERCE  
PUBLICATION



# JAPAN

## The Government-Business Relationship


A Guide for the American Businessman

日本



U.S.  
DEPARTMENT  
OF  
COMMERCE

Bureau of  
International  
Commerce



Digitized by the Internet Archive  
in 2012 with funding from  
LYRASIS Members and Sloan Foundation

# **JAPAN** **The** **Government-Business** **Relationship**

**A Guide for the American Businessman**

日本

By Eugene J. Kaplan  
Director, Far East Division  
Bureau of International Commerce

U.S. DEPARTMENT OF COMMERCE  
Maurice H. Stans  
Secretary

James T. Lynn  
Under Secretary

Harold B. Scott, Assistant Secretary  
for Domestic and International Business

BUREAU OF INTERNATIONAL COMMERCE  
Robert Beshar, Director

**FEBRUARY 1972**

For sale by the Superintendent of Documents, U.S. Government Printing  
Office, Washington, D.C. 20402. Price 65 cents

# Foreword

The crowded events of the past six months underline the need for American businessmen to be well informed concerning the forces which shape the international economy. Japan, which has burst upon the world market with unprecedented energy over the past ten years, is surely one of those forces. In a few short decades, it has moved from a physically and economically devastated nation to the world's third largest producer of goods and services.

A growing body of opinion is now suggesting that Japan's unparalleled rate of economic growth has been facilitated by an almost unique relationship between business and government in that country. Some even hold that the extensive forms of cooperation between business and government have provided Japan with an unfair competitive edge in the world marketplace. This opinion has become personified in the expression "Japan, Incorporated," which suggests a total merging of business interests in the governmental policies of Japan.

The Japanese, for their part, do not consider that their government-business relationship differs greatly from those in many other industrialized countries. The term "Japan, Incorporated," with all it has come to imply, is for them one-sided and inaccurate.

What has become increasingly clear is the need for further examination of the real nature of government-business relations in Japan. I therefore requested the Bureau of International Commerce to investigate the extent, methods, and effectiveness of government-business interaction in Japan. This study reports its findings. The insights gained will, I hope, provide American businessmen and others involved in United States-Japan economic relations with a clearer understanding of the workings of the Japanese economic system.

Maurice H. Stans  
Secretary of Commerce  
February 1, 1972



# Contents

I. Japan's Economic Thrust—Patterns of Growth at Home and in World Markets . . . . .	1
The Dimensions of Japan's Economic Growth . . . . .	2
Factors Influencing Japan's Economic Growth . . . . .	7
II. An Overview of Government-Business Interaction in Japan . . .	11
Is there a "Grand Design" for the Japanese Economy? . . . .	12
The Concept of "Japan, Incorporated" . . . . .	14
The Managed Economy—The Economic Priorities . . . . .	17
Government-Business Interaction—A Pervasive Force . . . . .	20
III. The Mosaic of Interaction—Businessmen, Politicians, and Bureaucrats . . . . .	23
Bureaucrats and Politicians . . . . .	25
Politicians and the Business Community . . . . .	26
Business in Government—Bureaucrats in Business . . . . .	27
IV. Mechanics of Interaction—Why Interaction Works So Well in Japan . . . . .	29
Administrative Guidance—Carrots as Well as Sticks . . . . .	30
Group Dynamics—The Consensual Approach . . . . .	32
Grow Now, Profit Later . . . . .	34
Organized Business and its Dialogue with the Government . .	35
Business Needs—The Government's Response . . . . .	37
V. Interaction in Practice—Patterns of Establishing and Achieving National Economic Goals in the Computer, Steel, and Motor Vehicles Industries . . . . .	41
Where the Overview and Case Studies Come Closest . . . . .	42
Differences in Concept and Practice . . . . .	48
VI. Perspectives on Government-Business Interaction in Japan . . . . .	55
Shortfalls of Government-Business Interaction . . . . .	57
Why Government-Business Interaction Works— When It Works . . . . .	60
Some Reasons Why Interaction Fails . . . . .	64
Summing Up . . . . .	69
Footnotes . . . . .	73
Appendices . . . . .	75
Case Studies in Government-Business Interaction	
A. The Development of the Japanese Computer Industry . . . .	77
B. The Rationalization of the Japanese Motor Vehicle Industry	103
C. The Expansion of the Japanese Steel Industry . . . . .	137

# Introduction

In recent years, the American business community has come to view Japan with decidedly mixed feelings compounded of admiration and growing uneasiness. The admiration stems from the manner in which Japan has recovered from the setbacks caused by World War II, and has emerged as one of the world's foremost economies. The uneasiness stems not just from the impact which Japanese economic growth has had on the American economy, but from the feeling that Japan may be playing the economic game under a different set of rules than obtain in this country.

The essence of this difference resides in the relationship of business and government in the two economies. Many American businessmen have become accustomed to big government and to very considerable government intervention in the nation's economic life. But such intervention is still viewed as an exception to the general rule that whereas government through its fiscal and credit policies and other means must set the framework for business enterprise, still such enterprise is best controlled and directed by the competitive forces of the free market. U.S. business has inherently distrusted or been skeptical of governmental authority and has striven to restrain the use of political power.

In Japan, business certainly responds to market forces as they make themselves felt domestically and in the larger international world of trade and investment. Yet, in Japan, the intervention of government in guiding and directing the economy is far more pronounced than in the United States. Japanese businessmen take it for granted that there will be a continuous dialogue between business leaders and government officials, and that neither will make major policy decisions or undertake major projects without consulting each other. Japanese business as a whole does not object to its government's active involvement in business matters. There is not the same adversary stance towards government that characterizes the general attitude of U.S. businessmen. Conditioned by cultural and historical influences, Japanese business accepts, though perhaps more reluctantly as time goes on, the government's leadership role.

Confucian precepts are among these cultural influences. That morality emphasizes that the interests of the state come before those of the individual. The *samurai* warrior's code which embodied the Confucian moral of service to the nation was carried over from feudal times into the business life and civil service of Japan.

Businessmen also came to accept the government's leadership because that role was established in the beginning of Japan's industrialization, and because through the years the government has performed its tasks with commendable skill, verve, and finesse. In those early days, government

did not hesitate to encourage the development of industry by any means. It built, owned, and operated new types of factories to demonstrate to would-be industrialists what needed to be done. The government also encouraged private enterprise and initiative by introducing the corporate form of business venture and the joint stock company. In the decades since then, the Japanese business community has grown to look to the government for financial and other forms of assistance.

The continuous interaction between business and government in Japan has been summed up by a pungent phrase. In the United States, corporations and government generally each work in their separate spheres. In Japan, outsiders at least seem to be dealing with something that popularly has come to be called, "Japan, Incorporated."

The purpose of this study is to investigate and explore the meaning and significance of "Japan, Incorporated," especially for U.S. businessmen who of necessity or by preference do business with or in Japan. Chapter I focuses attention on the extraordinary growth of the Japanese economy in the 1960's, and its impact on the United States. It also reviews the many factors that have contributed to this growth. This inquiry leads naturally to the relationship of Japanese business and government, which is the study's chief concern.

Subsequent chapters sketch in what this business-government relationship entails and, so to speak, construct a general model of how it works. They describe, in a general way, the reasons behind government and business interaction, and the mechanics by which government and business reach agreement on the national economic goals and targets sought and their implementation. The many connections and the consultative apparatus that bring businessmen, bureaucrats and political leaders together, both formally and informally, to plan and execute Japan's economic priorities are also reviewed.

Finally, this model or general description is tested against the findings of specific case studies of government-business interaction in three major Japanese high growth industries—computers, automobiles and steel. These studies were prepared under contract for the Bureau of International Commerce by Thomas M. Hout of the Boston Consulting Group under the direction of Dr. James C. Abegglen, vice president of the Group and head of its Tokyo operations. The case studies, reproduced in the appendix, have provided rich material for the preparation of this general review of Japanese government-business relationships, and should be of considerable interest in themselves to American businessmen.

Susan T. Minick of the Bureau of International Commerce assisted in the preparation of this study. Many Japanese and American businessmen, government officials, and scholars contributed to it. Special mention should be made of the valuable assistance and advice provided by the staff of the American Embassy in Tokyo, Dr. Eleanor M. Hadley of the U.S. Tariff Commission, and Dr. Herbert Glazer of the American University.



# Chapter I

## Japan's Economic Thrust— Patterns of Growth at Home and in World Markets

經濟



A late starter compared with the industrial nations of the West, Japan launched an industrialization program in the middle of the 19th Century. The circumstances which induced the progressive and energetic new regime of Emperor Meiji to lead Japan out of the feudal era are dramatically described by one Japanese commentator. He writes as follows of the well known opening of Japan to the West by Commodore Perry's expedition:

For about eleven centuries, from the dawn of our written history to the 19th Century, Japan was independent, self-contained, and developing a culture which, though different from the West, was quite sophisticated. China had substantially influenced Japan during this period. Then, in 1843, Japan saw the rise of the West at the expense of the Chinese Empire. In 1853, our great-grandfathers gazed upon the Western powers coming into Tokyo Bay as leviathans equipped with engines and guns. For the fifteen years from 1853-1868, when your people were fighting for freedom of the colored, we also were in a state of civil war which centered on the question of opening the doors of the nation to the powerful strangers.

Japan was much quicker than other Asian countries in comprehending the new situation and switching to a policy of open ports, as she thought that she could maintain her independence only by acquiring strength from the West. Other Asian governments thought that liberalization would only result in the collapse of their regimes and the loss of national independence.<sup>1</sup>

A century and a quarter after Perry's black ships steamed into Tokyo Bay, Japan still is the only developed nation in Asia, possessed of one of the largest and fastest growing economies in the world.

### **The Dimensions of Japan's Economic Growth**

This extraordinary record was dramatized when in 1968 Japan moved ahead of West Germany into third place in the international growth league, with a gross national product (GNP) (at current prices) of \$142 billion. Only the United States, and the Soviet Union now produce a greater value of goods and services than Japan. In 1970, Japan's GNP, which grew to nearly \$200 billion, was still about one-fifth that of the United States and something less than a half as large as the Soviet Union's. But in terms of the rate of growth, Japan forged ahead in striking fashion during the 1960's, outranking any other major industrial nation as shown by the following table:



	GNP at Constant Prices	
	Average Annual Increase	
	1950-60	1960-1970
<b>Japan</b> .....	9.1%	11.3%
West Germany .....	7.9	4.7
France .....	4.5	5.6
United Kingdom .....	2.8	2.7
Italy .....	5.6	5.7
United States .....	3.2	4.2

Source: OECD

Nor is Japan's come-back by any means over. By 1975, if Japan continues to develop at anything like the recent pace, her GNP is expected to exceed the total of the six charter members of the European Common Market. Indeed, there are those who believe that one day Japan may pull abreast of the USSR in total output, and even challenge the number one position of the United States itself.

It is unnecessary, however, to engage in these speculations to be impressed by Japan's development—a development all the more remarkable considering her basic assets. The islands that constitute Japan geographically comprise an area about the size of California. Japan is endowed with few natural resources except her own hard-working population. Over 100 million people are largely crowded along Japan's island coastlines. In 1969, Japan's per capita income ranked her only fifteenth among the nations of the world, and was exceeded by such countries as Canada, Australia, France, and Britain. In coming years, this story may well change. Japan's per capita income, which was only \$1887 in 1970, may well rise to within the \$3,000-\$4,000 range in 1975.

While exports have contributed to Japan's economic growth, substantially so in some instances, their importance has often been overemphasized in this connection. It is the domestic markets which have absorbed the lion's share of the new products incorporating advance technology imported from abroad which come off the assembly lines in such abundance.

Indeed, Japan's dependence on exports while greater than in the case of the United States is a good deal less than that of many other nations as indicated in the table below:

	Exports, 1969	
	Value (\$ billion)	As Percent of GNP
United States .....	\$37.4	4.0%
<b>Japan</b> .....	16.0	9.6
France .....	15.0	11.5
United Kingdom .....	17.5	16.0
West Germany .....	29.1	19.2
Canada .....	14.3	19.8
Belgium .....	10.0	44.1

Source: Official data of listed countries.

The Japanese industrial complex which emerged during the 1950's and 1960's resulted from a deliberate restructuring of the economy, done

largely according to national plan. Light industry, for instance, accounted for 50% of total industrial output in 1955. Now, heavy and chemical industries contribute 70% of what Japan's factories produce. The shift resulted from measures taken by the government in the 1950's channeling resources into those industries for which there was a growing world demand. The targets were greater production of machinery, metals (especially steel), chemicals, and ships, which were manufactured at high cost in Japan during that time. There was also a conscious effort to shift low productivity labor as well as capital and other resources into more productive sectors, and in general, to upgrade quality and improve efficiency.

This restructuring of industry, on top of the massive reconstruction of war-shattered plant and equipment, is indeed one of the miracles of Japan's postwar growth. But a second feat is perhaps the more remarkable. "The fabrication of wholly new products through new industrial processes has required the re-education of both the domestic and foreign markets. . . . In the absence of a high level of domestic demand and a change in foreign attitudes towards Japanese industrial products, the reconstruction and reform of industry would have been without point." <sup>2</sup>

The result is that Japan now ranks second in the world in petrochemical and motor vehicle production, and third in steel. The extensive and growing list of items for which Japan is the world's number two producer includes such technically sophisticated goods of a new generation of growth industries as television sets, radios, telephones (in service), semi-conductors including integrated circuits, electronic components, and wristwatches. Efficiency and precision in mass-production characterizes another industry in which Japan has for long been number one—shipbuilding. Since the mid-1950's, Japan has built the largest tankers afloat, and maintains its lead by producing ever larger mammoth tankers. Japanese steel production may rank number one by the mid-1970's. In the last decade, while steel production in the United States, West Germany, and Great Britain remained stagnant, Japan succeeded in trebling its production. Nippon Steel, recently founded through merger of the two biggest Japanese steel producers, has surpassed U.S. Steel as the largest steel firm in the world. Eight of the world's 10 largest blast furnaces are in Japan. Supported by a greatly expanded steel industry, machinery (including electric machinery) is the industrial sector which has grown the fastest in the last few years.

Domestic demand has also been fed by the emergence since World War II of a mass consumption society in Japan. Paradoxically, a nation of unparalleled savers has also become one with a high propensity to consume. The Japanese speak of a "consumption revolution." The "three C's"—color TV, cooler( room air conditioner), and car have become the goal of almost every Japanese family. By 1970, more than 90% of households in Japan owned at least one TV set, washing machine, and refrigerator. The acquisition of these and other consumer durables like auto-

mobiles, vacuum cleaners, and sewing machines accelerated rapidly during the 1960's. Ownership is widely diffused, even among the low-income brackets.

There are gaps, however, in the record of Japan's economic accomplishments. The first is the mounting deficit in public works, long neglected while attention was so sharply focused on industrial development and economic growth. Less than 15% of Japanese homes are connected to sewer facilities, for example. Expanded public transport and telecommunications facilities, schools, housing and improvement of the environment are among the areas that will divert a much larger portion of Japan's resources to the public sector than in the past.

Moreover, Japan's industrial achievements obscure the fact that a large segment of the Japanese—in fact, two thirds of the labor force—are not integrated into the modern, efficient, technologically sophisticated economy that characterizes the Japan visible overseas. In fact, what largely accounts for Japan's low per capita income is the low productivity in these thousands of smaller firms, as well as in the other less developed sectors like agriculture, forestry and fisheries, and the service industries.

**Trade Impact of Japan's Industrial Growth.**—The restructuring of Japan's industries is reflected in the pattern of Japanese trade, both in commodity mix and direction. Exports, some \$19 billion worth in 1970, are geared to markets for sophisticated goods found largely in the Western countries. The developed countries took about 60% of Japan's exports in 1970. Textiles, for example, which in 1956 comprised 35% of total exports, declined to 12% in 1970. Other traditional exports were also replaced by products of the new growth industries for which there was great demand abroad.

Exports of such technically sophisticated items as chemicals, automobiles, machinery and equipment have an average annual growth rate of 20-40% over the decade of the 1960s. Even more astounding, exports of electronic desk computers have increased three to four times every year since 1966. With growth rates like these, it is not surprising that Japan's exports have increased three times as fast as total world exports. The result, of course, is that Japan's market share in the world economy has grown and continues to grow at a rate outstripping other nations' efforts.

There are many factors which account for this upsurge in Japanese exports. The rapid increase in productivity and lack of labor strife in the Japanese economy were important in this respect. So has the ingenious as well as attractive product design, general upgrading of the quality and reputation of Japanese goods, and aggressive salesmanship. A rate of exchange for the yen, unchanged throughout the postwar period until it was revalued in December 1971, according to many authorities, also accounted for much of the demand for Japanese goods abroad.

Imports in turn mirror the seemingly insatiable appetite of Japanese industry for fuel and raw materials. It is said that oil tankers follow each

other into Japanese harbors at 100 mile intervals. Millions of tons of copper, nickel and iron ore, coking coal and bauxite pour into Japan's fine ports. Machinery and equipment of the most advanced models for Japanese industry account for more than 10% of the value of Japan's imports. Food and feedstuffs also arrive in huge quantity; Japan is only 85% sufficient in this respect.

Japan's import bill has grown rapidly to meet the needs of Japan's booming economy. But Japanese exports, boosted to over \$19 million in 1970 by the vigor of Japan's export drive, have grown at an even faster rate. As a result, Japan's balance of trade has shifted from chronic deficits to mounting surpluses.<sup>3</sup> To the concern of many nations, that surplus grew to \$4 billion in mid-1971.

**U.S.-Japan Trade—Interdependence and Stress.**—The trade statistics show the special economic relationship between the United States and Japan. They demonstrate how much the United States and Japan have come to depend on each other's market, and why this is a source of strain between them.

The United States has long been Japan's principal trading partner. Roughly one-third of Japan's total trade, about the same proportion for both exports and imports, is with the United States. On the other hand, except for Canada, Japan is our best foreign customer. Over 10% of total U.S. exports in 1970 were shipped to Japan. During the 1960's the value of that two-way trade more than doubled to reach a total of \$10 billion, which represents more overseas trade between two countries than ever before in history.

	Value, in \$ billion				% inc.
	1960	1965	1967	1970	1960-70
Total Two -way Trade .....	\$2.6	\$4.5	\$6.0	\$10.5	306%
U.S. Exports to Japan .....	1.4	2.1	3.0	4.7	222
U.S. Imports from Japan .....	1.1	2.4	3.0	5.9	412

Source: Bureau of the Census, U.S. Department of Commerce.

While U.S. exports to Japan increased more than three-fold, American imports from Japan during the 60's increased at an even greater rate. As a result, the balance of trade, heavily in the U.S. favor during the 1950's first dwindled, and then turned in 1964.<sup>4</sup> Since then, Japan's trade surplus has mounted almost every year. Our imports from Japan exceeded American exports to that country by over \$3 billion in 1971.

Not only has the balance of this trade changed, but also its composition, especially the nature of Japan's exports to this country. The make-up of U.S. exports to Japan has changed relatively little. The United States is still a major world producer of the agricultural products and raw materials more than ever in demand by the burgeoning, resource-scarce Japanese economy. It is not, therefore, surprising that the products of America's farms, forests, and mines make up more than half the value of our ship-



ments to Japan. Indeed, Japan became our first \$1 billion overseas market for agricultural products in 1971. Machinery and equipment usually account for another one-quarter of U.S. exports bound for Japan.

On the other hand, American consumers are attracted in growing numbers to the new products available from Japan. Silks, pottery, cheap toys and souvenirs no longer typify that nation. A greater variety of Japanese products is increasingly apparent in America's homes and offices, on its highways and construction sites, in its factories and shops. The high quality of Japanese optical goods and electronic entertainment equipment now on the U.S. market have given a new image to Japan—an image likely to be strengthened as more Japanese motor cars appear on the roads. In producer as well as consumer goods, there has been an enormous upgrading of the quality of output, much of it featuring advanced technology.

Most if not all of Japan's newer growth industries have been built upon real or potential domestic demand. But the American market has become important for certain Japanese industries.

Percent of Japanese Production  
Exported to the U.S., 1970

Passenger cars .....	11.1%
Television sets .....	27.0
Radio receivers .....	53.1

Source: Ministry of Finance and Bank of Japan.

The pace as well as the range of Japanese penetration can have a considerable impact even when Japan's share of the U.S. market is still a relatively small one. Japanese autos accounted for only five percent of the U.S. market in mid-1971, for example. But in 1971, Americans imported about double the value of Japanese automobiles bought the previous year. It is this kind of market penetration, coming at a time when American industry is faced with difficulties on its homefront, which has caused so much malaise in the U.S. business community regarding Japan's economic thrust.

## Factors Influencing Japan's Economic Growth

Many factors have influenced this spectacular course of the Japanese economy. It would be difficult, and not particularly profitable, to attempt to assess the relative importance of each in Japan's economic success. A basic element has undoubtedly been the character of the Japanese people. By culture, tradition, and necessity the Japanese farmer and artisan have possessed the very qualities often associated with the Protestant Ethic which gave the West the capitalist system and an industrial society: a capacity for hard work and a readiness to postpone consumption by saving and investing. The Japanese have consistently saved at a higher rate than Americans and Europeans, presently about 20% of their disposable income.

This high personal savings rate has made possible a rate of investment in Japan unparalleled in the West. Japan has allocated a larger part of its gross national product to investment than other industrialized countries. It was one-third on the average for 1965-69 compared with one-quarter for West Germany, and less than one-fifth for Britain and the United States. In the Japanese economy, moreover, the investment has been mainly in the high priority and growth industries.

Japan's expanding industry has also been able to draw on an ample supply of well-trained and diligent workers. Japan's traditionally high literacy rate and demanding educational system have upgraded the skill and adaptability of its labor force. Products "Made in Japan" reflect the creativity, discipline, and technical and engineering know-how that mark the modern Japanese industrial worker.

At least for the modern sector, productivity as well as output has been promoted by unusually favorable labor-management relations. Though labor is widely organized into company based "enterprise" unions, production is rarely interrupted by wage disputes or work stoppages. The Japanese system of life-time employment and the generally paternalistic attitude of employers have had something to do with these excellent industrial relations. More important, perhaps, is the fact that labor's wage demands have been largely met. Wages increased at an annual rate of 11-12% during the 1960's. Productivity, however, more than kept pace with these hikes in labor costs. Since 1969, a change in this trend has been noticeable. But productivity gains of 11-14% annually in the 1960's have far exceeded the experience of the United States.

Besides being the product of favorable labor-management relations, such high productivity was the result of heavy investment and large inputs of modern technology, already proven and readily available from abroad. Reconstruction of industrial capacity destroyed during the war provided the opportunity for installation of the latest equipment and application of the most modern methods and processes. In fact, much of the plant in Japan's major industries has been installed in the past 15-20 years and is modern, incorporating advanced technology.

Resources have indeed been concentrated on industrial development. Government expenditures on defense and armaments have amounted to less than one percent of Japan's GNP, while, as previously noted, spending on road transportation, housing, the environment, and other needs has been deferred. The Japanese hold that Japan is not as affluent as it may appear considering that country's urgent need in the immediate future to channel finances and resources into projects intended to make up this neglect of the underdeveloped sectors of their economy.

Still other factors have contributed to Japan's economic success. Some authorities attach great importance to certain cultural and sociological qualities of the Japanese. An insular, tightly knit, and culturally homogeneous people, the Japanese are proud and ambitious for their group and



for their country. A sense of being Japanese leads labor as well as management to identify strongly with the nation's economic goals. A late start in the mid-1800's in the race for industrial development, and setbacks experienced as a result of World War II have naturally imbued the Japanese with a burning desire to catch up. A proud people, they are prone to measure their success by how well their group or nation has fared against the best or the biggest. Their drive and commitment to a high rate of economic growth has coincided with increasing prospects for expanding markets at home and abroad. Competing producers have matched increases in capacity with each other to maintain their share of an established market or to assure their place in a new one. This tremendous outburst of entrepreneurial energy has been given direction by the unusual talents of the Japanese people, their ability to focus with great singlemindedness on the task before them, and their capacity in a number of ways, to discount the present for the future.

The United States has played an important role in these achievements, contributing at crucial times to the development of Japan's growth economy. In the immediate postwar period, American loans helped Japan repair the ravages of war, and economic policies pursued by the Occupation authorities aided efforts to stabilize the yen and convert and restructure Japanese industry. Despite the haste with which so much of their work appears to have been undone, the antitrust policies fostered by the Occupation authorities did help promote more competitive behavior in the immediate postwar economy. Without the overwhelming presence and control of the top-holding companies of the prewar *zaibatsu* combines, there was more opportunity for new and independent business initiatives. American expenditures on Japanese materiel and services during the Korean War created needed demand at a critical turning point for the Japanese economy. Large amounts of U.S. technology and know-how transferred to that country through the patent licensing process also helped establish a firm foundation for Japan's industrial growth. Then too, the United States has long furnished Japan's best market. It was an especially welcome one in the 1950's when most countries were short of foreign exchange and the few others in a strong balance of payments position provided little access for Japanese goods. Even after considerable change in the world economy during the 60's, no other nation, including the now prosperous countries of the European Economic Community, takes more than 5% of Japan's exports.

## **The Government-Business Relationship**

When all of these factors have been weighed, however, there is still a missing element in explaining Japan's performance, and it is the element with which this study is primarily concerned and which is of primary

concern to the American business community. It is the special and unique way in which the Japanese government has guided the economy's development and the interaction of government and enterprise which is the peculiar hall-mark of the Japanese economy. Japan's economic destiny has not been left to the free play of market forces. The government has undertaken from the beginning of Japan's modernization and industrialization to identify objectives and priorities for the Japanese economy. The government has also sought to facilitate the achievement of these goals. It has, in any case, tried to assure that the private sector does not lack the wherewithal for this purpose.

Yet, put all this together and one does not come out with a totally planned economy of the Russian type—far from it. The essential characteristic of the Japanese government-business relationship is that the business community and the various government departments have been in close communication with each other from the days of the Meiji Restoration. The result is a style of industrial development which has allowed Japanese business considerable initiative and independence even when subject to administrative guidance facilitated by a variety of government aids and incentives. The acceptance, to a greater or less degree, by Japanese businessmen of the government's goals and priorities is based on two all important factors:

- a reluctance on the part of both business and government to unilaterally adopt policies or undertake major moves in the high priority sectors of the economy without consulting each other;
- a propensity, which all Japanese share, for a consensual approach to harmonizing differences that may exist within as well as between each group.

These cultural traits are of the essence in explaining how "Japan, Incorporated" works. For, as one authority points out, only a limited legal basis exists for the government's involvement with the private sector. The "administrative guidance" which takes place is no less compelling than law.<sup>5</sup> There are a number such intangibles, both subtle and complex, in the interaction of government and business in Japan. Together with the extensive apparatus which has been constructed to facilitate this interaction they have produced a government-business relationship unique to Japan.

## Chapter II

# An Overview of Government-Business Interaction in Japan

概観

## Is There a "Grand Design" for the Japanese Economy?

Ask a cross section of Japanese if there is a "grand design" for their country's economy and the answers from industry executives, bankers, economists other scholars, and government officials will be wide-ranging, but more negative than positive. Many will challenge the view that the course of the Japanese economy is predetermined and directed in any sort of formal sense. They do not accept the thesis that Japan's economy has been skillfully managed according to some sort of master plan. No, say some Japanologists, the Japanese are much too intuitive to act with that degree of rationality. Developments are purely anonymous; they do not happen according to a plan. Rather, Japanese react to situations and challenges with ad hoc programs—like the need to meet a shortage of petroleum, or to develop an aircraft industry, or to deal with international competition at home and abroad. Crises or problems stimulate the required response from both government and business, that is, such new initiatives as the rationalization of whole industries, export expansion programs, exploration for new raw material sources, or whatever others may be required to achieve the objective sought.

At this end of the spectrum lies the view which can be termed the Japanese mystique. Japan has been so successful economically, adherents of this thesis claim, because practically every Japanese—the man on the street, the farmer, the shopkeeper, the worker on the assembly line, as well as the captains of industry and the senior civil servants—want Japan to achieve a high rate of economic growth and knows what he has to do to that end. How do they all know? The highly effective mass media in Japan—national newspapers, radio, and television—daily impart the economic facts of life to a literate and highly interested population.

Not surprisingly, quite a number of Japanese deeply involved in the workings of the economic and business system will comment that they really have not thought very much about how it all gets put together. Some offer a somewhat more sophisticated version of the "everyone knows what has to be done" thesis. The "everyone" in this version is the establishment of businessmen, politicians, and bureaucrats which, in effect, makes the economic decisions for Japan. These gentlemen not only know what has to be done because they are doing it; they are also in close frequent contact with each other on such matters. Because of this kind of informal communication, government and business are able to concert their actions, plans, strategies, and programs to push Japan ahead in the economic growth league.

So close and effective is this contact and coordination that some experts on the Japanese economy doubt whether a clear distinction can be made between government and business. For example, a concentrated pattern of lending to certain industries by both government financial institutions and the commercial banks can often be discerned in Japan's economic



history. Is that a coincidence? "No," replies one Japanese banker, "the banks recognized, at about the same time as the government, that Japan had to quickly expand its steelmaking, machinebuilding and shipbuilding capacity, for example, and so lent heavily to firms in those industries."

Behind the negative reaction to the question whether there is a grand design also lies the concern that outsiders might interpret the Japanese economic system as one which the government rigidly controls. Japanese resent any notion that their businessmen are automatons completely under government influence. "We are a free enterprise economy," or "we are a private enterprise economy," were frequent responses of those asked the grand design question. In fact, any comparison of the Japanese economy with socialist or "centrally planned" ones would certainly be inappropriate. We must seek descriptions that are far more subtle and complicated.

A number are now in general use which shed considerable light on the real situation. All indicate the heavy government presence in the workings of that economy. Japan has been termed a "mixed economy," meaning one that combines private initiative with pervasive government guidance.<sup>6</sup> Similar meanings are implied by terms like "consent economy" and "concerted economy" which have been used by the Ministry of International Trade and Industry (MITI) to describe the Japanese economic system.

A 'concerted' economy represents the middle way between 19th century laissez-faire [in the West] and the controls of the war period of the 1930's in Japan. . . . In place of the strife under freedom and the compulsion under controls, it is possible to have a 'consent economy.' . . . Out of discussions between the government and private enterprise, mutually determined national targets are worked out. Private enterprise pledges to carry these out. Government, on its side, pledges special favors . . . such as subsidies and taxation measures. . . . Mutual consent and bilateral methods obviate the need for legal compulsion. . . . There are two restricting conditions for such a system to be successful. There must be confidence between the parties. In this way, mutually consented objectives become the objective which actually is possible. The second condition is the existence of market order among the bilateral parties. The contracting parties, with the Government and among themselves, have many private industry groupings, which assure that moderate concentration will be realized. . . .<sup>7</sup>

Other authorities characterize the economic system in Japan as "sponsored capitalism." Common to capitalistic economies of this type is some degree of government control or regulation of business enterprise. While the Japanese economy functions basically on the principle of capitalistic, private-enterprise competition, the state maintains some control over foreign trade, domestic and foreign investment, and industrial capital financ-

ing. Present-day Japanese capitalism is far less "sponsored" than before the war. The state currently operates only a small part of the economy. The most important government-controlled operations are the dozen or so financial institutions like the Japan Development Bank, the Export-Import Bank and the Small Business Finance Corporation. Also, partially publicly owned are the communications industry and the airlines and railways, while the government wholly owns the revenue monopolies in tobacco and salt. Other corporations with capital totally or partially paid by the government are established to meet specific national needs. These include the Coal Mining Area Reconstruction Corporation, the Small and Medium Size Enterprises Promotion Corporation, and the Japan Electric Power Sources Development Company. While only a small share of the total, government-owned enterprises are strategically placed. The state-owned Japan Telephone and Telegraph Corporation, for example, is a major customer for the products of the Japanese electronics and computer industries, the latter a high priority growth target.

The government has not owned any significant share of Japan's industry since about the turn of the century, but this does not inhibit it from playing a major role in the Japanese economy. One indication of how deeply the government is involved in the economic process is the fact that the legislative and executive branches are estimated to devote about 90 percent of their time to the problems of business and industry. Government ministries and agencies, if they do not in fact take the initiative to find and appraise new opportunities, work closely with business in the process. They help promote and otherwise facilitate new ventures in high priority industries. The administrative bureaucracy exerts a powerful influence on the course and shape of Japan's development. It promotes, protects, controls, regulates, and often manages economic activity. In doing so, government consults frequently with the industry and firms involved, both before and during the implementation of the measures and programs adopted.

## **The Concept of "Japan Incorporated"**

One very senior government official summed up the way most Japanese feel about "Japan, Incorporated" in an address to an inter-governmental group.<sup>8</sup> He said:

. . . recently some people have expressed the opinion in relation to Japan's industrial policy that Japan in its entirety is like a corporation ("Japan, Inc."), that the Japanese Government, particularly MITI, is the corporate headquarters, and that each enterprise is a branch or division of the corporation. Some view the relationship between government and industry as being that between hand and glove. However, the postwar recovery period being as it may, today



there is no such thing as unilateral MITI direction of business activity of individual enterprises or passive acceptance by business of government judgment.

Those who have helped introduce the "Japan, Incorporated" concept in the growing body of literature on Japan's economy picture it as a conglomerate whose structure can be considerably looser than that of a "corporate headquarters." The conglomerate is actually a Japanese invention. The *zaibatsu* holding companies of the 1930's and 1940's were, in effect, conglomerates. But the conglomerate referred to here is much more like the more loosely knit, giant, multi-divisional, diversified corporation which has become so familiar on the American business scene. Each major component of the conglomerate known as "Japan, Incorporated," call it a corporate-division or industry, has considerable leeway, in fact direct operating responsibility to carry on its own business in the most efficient and profitable manner. Such units, and subdivisions of them, are free to compete with each other within broad limits.

At the same time, the top management of the conglomerate is in a position to mobilize and deploy the resources of the entire combination. Top management coordinates the various component operations according to plan to make the conglomerate yield the maximum return for the Japanese nation. The conglomerate's managers continually seek to shift resources from mature to dynamic industries in order to advance the rate of economic growth. They may also monitor or oversee the capacity of new industrial installations to assure "orderly" production as well as economies of scale. Top management is concerned too that certain sectors of the conglomerate be able to compete on world markets. They want those "divisions" to be in a position to export incremental production until the domestic market has developed sufficiently to absorb the share of output contemplated in planning that industry's development and expansion.

This is not a bad analogy, especially if it is appreciated that most American conglomerates, unlike the Japanese or *zaibatsu* version, do not operate in a monolithic and authoritarian fashion. Nor, for that matter, does "Japan, Incorporated". It should not be thought of as an organization with the bureaucracy in command issuing directives for immediate action and compliance by business. It does not work that way. Within the framework of "Japan, Incorporated" outlined above, neither government nor business necessarily imposes its will on the other or assumes leadership unilaterally. There is, instead, a kind of participatory partnership between government and business operating toward generally agreed upon goals. Nor do all initiatives come from the top of either the government or business establishment. Under the Japanese system of decision-making, new proposals can and often do originate down the line.

The government may provide leadership for business, but goal setting

is no more the sole province of government than the implementation of those goals. Rather, goal setting is usually the result of consensus between government and business. What can be said to happen is business as well as government sits on the board of directors of "Japan, Incorporated." The views and approaches of the various interests represented on the board do differ and clash. There is much more competition and infighting within the bureaucracy and business groups and with each other than would appear on the surface. The harmony that often appears to characterize relations between business and government in Japan can thus be illusory. Harmony and consensus are the result of interaction rather than its basis.

Consensus frequently has to be hammered out in particular Japanese fashion. It is arrived at through "elaborate consultation," through a "complex apparatus of interaction" between business and government. Sometimes it takes a long time before consensus is reached; it may not happen at all on certain rare but important occasions. Though few in number, there are mavericks and non-conformists in many divisions of the conglomerate who are responsible for such lapses.

More important is the fact that "Japan, Incorporated" has been such a smashing economic success. This has no doubt been due to the skill of conglomerate management in coordinating the operation of existing units. Success has also resulted from the managers' talent for channelling funds and resources from older industries to ones with a high growth potential. This process requires them to anticipate and assure that the financial and resource needs of the new industries will be met. How do the conglomerate's managers know what these needs will be?

A MITI Vice Minister, speaking on Japan's basic industrial philosophy, said, "Businesses introduce new products and develop export markets on their own initiative. The main role of MITI is to come up with a vision to serve as a policy target, and to persuade and guide industry toward that vision".<sup>10</sup>

Others would describe MITI's "vision" in less ephemeral terms. "Japan is a nation with economic priorities" is the observation of one well established and very knowledgeable member of the American business community in Japan. An equally well-informed and experienced colleague of his has commented, "The administration in Japan assumes responsibility for defining the national interest, and doing the necessary to see that these goals are achieved. The government's planning has therefore evolved phase by phase in accordance with the economic priorities of the period." Another American, an astute financial observer, has put it, "There is evidence of a concerted pattern of investment which implies selective coordination of the economy by the Japanese authorities."<sup>11</sup>

This is not just an outsider's point of view. It is shared by many Japanese, including one highly placed in a government agency deeply involved in the development and expansion of industry in Japan. "The

government," he remarks, "provides a climate for economic growth by advising business of the national economic priorities."

## **The Managed Economy—The Economic Priorities**

National economic plans, which establish the economic priorities for Japan, are prepared at the initiative of the Prime Minister. They are drawn up by the Economic Planning Agency (EPA) assisted by outside experts as well as those from a number of other government agencies. The business establishment is drawn into this process along with a smaller representation of economic specialists from the universities, the research institutes, and the press. Business is heavily represented on the Prime Minister's Economic Deliberation Council and its many sub-divisions. The Council and its staff are responsible for establishing the frame of reference and much of the background work on the plans produced by EPA. Business organizations and economic research institutes supply data and surveys which also enter into the planning calculus.

The very able economists and statisticians on EPA's staff use highly sophisticated analytic techniques like input/output matrices to predict the future needs and productions of the Japanese economy. There may be, however, a more intuitive input into the planning process. Asked how the growth industries are selected, several of the experts most involved in Japan's planning efforts assign considerable weight to the U.S. experience. One replies, only partly in jest, "Oh, we just look at the major industrial developments in the United States during the latter part of the 1960's and then know where we have to go in the 1970's."

Businessmen are involved to an even greater extent in the industrial planning undertaken mainly by MITI. Liaison between government and business is very close in this area. Business leaders serve on MITI's powerful Industrial Structure Deliberation Council and its supporting committee structure. Industry and trade associations carry on with MITI much of the day-to-day dialogue between government and business.

Neither EPA nor MITI can be likened to a general staff, an economic GHQ working out the operations of the Japanese economy in a militarily precise way. The Japanese apparently drew on French experience with indicative planning in developing their own form of economic planning. Thus, their planning is intended mainly to establish economic and industrial development priorities, or targets, for Japan.

EPA's priorities and goals focus on broad objectives for the Japanese economy, such as price stabilization, improvement of Japan's international financial position, promotion of social development, "rectification of the dual structure of the economy." From the standpoint of the long-term needs of the national economy, they also give industry-by-industry fore-



casts of proposed production and investment levels. These are not government assigned quotas or even rigid targets which industry must meet. They are simply government forecasts which will give both private enterprise and government an idea of the *direction* that the economy should take during the plan period.

MITI, on the other hand, develops more specific industry-by-industry goals within the general framework set forth by the EPA. These range from plant location, raw materials sourcing, and licensing of foreign technology to others like those discussed in the case studies in the appendix: expansion and modernization of the steel industry, rationalization of the motor vehicle industry and development of a highly sophisticated Japanese computer industry. In each instance, representatives of the industry concerned are in constant contact with MITI so that both viewpoints are considered and both sides abide by the results.

The authorization of a contract for the importation of technology for an ethylene production plant illustrates how this planning consultation process works.

At that time, in consideration of the fact that economy of scale would play a big part in the plant concerned, MITI adopted the policy of refusing on principle authorization of any plant of a capacity of less than 300,000 tons. But this was not decided unilaterally by MITI. It was adopted by a joint committee made up of representatives of both MITI and the industry after persuasion by MITI.<sup>12</sup>

What really turns goals, general and specific, set forth above into priorities is the singleminded way in which the government makes every effort to make certain that these objectives will be achieved. The government tries at least to assure that the business interests involved will be able to secure the financial and other resources required to make these achievements possible. In the process, the government enlists the support and cooperation of industry and the banks. Business, however, may already be committed to these priorities, having been drawn into the planning process to help formulate them.

Some Japanologists would call this too simplistic a description, a naive model of what happens. They are right; qualifications and perspective are in order. The concept that the Japanese economy is a managed one is acceptable to many students and observers of that scene only if it is recognized that:

- The government's planning is indicative rather than authoritative—in the nature of targets to be aimed for, guidelines to be followed.
- The plans are therefore not binding on the economic community; they generally do not control the activities of individual firms; they can be, in fact have been, ignored or rejected and individual interests placed ahead of the nation or group.
- Much of the planning is piecemeal and ad hoc.

- The blueprints are not all that detailed, there is room for considerable improvisation and innovation.
- Many economic developments that have helped Japan prosper have come out of industry initiatives and business inputs into the planning process.
- Planning is only part of Japan's success story.

These are formidable reservations, and they are not without substance. They did not, however, keep the London *Economist* from stating that Japan is:

the most intelligently dirigiste system in the world today. The ultimate responsibility for industrial planning, for deciding in which new directions Japan's burgeoning industrial effort should try to go, and for fostering and protecting business as it moves in those directions, lies with the government.<sup>13</sup>

Nor did these qualifications inhibit one of the foremost authorities on the Japanese economy from writing.

The hand of government is everywhere in evidence despite its limited statutory powers. The Ministries engage in an extraordinary amount of consultation, advice, persuasion, and threat. The industrial bureaus of the Ministry of International Trade and Industry proliferate sectoral targets and plans; they confer, they tinker, they exhort. This is the 'economics by admonition' to a degree inconceivable in Washington or London.<sup>14</sup>

Both these statements were probably more valid at the time they were written than they are now. Seen through Western eyes, however, Japan's economy is managed to a striking degree, even taking the above limitations on Japanese economic planning into account. More than the supply of money and credit and the height of interest rates, or the kind and level of taxation and government spending is managed in Japan. A direct and determined effort has been made to channel resources into the growth sectors of the Japanese economy, sectors earmarked for development and expansion. "The low priority industries are left to market forces," is how one of Japan's most eminent economists has expressed this distinction. Another has said, "The government doesn't waste time on industries not of national importance." Besides those which do not merit this kind of attention, there are others which do not need it. "Our economy is so expertly managed," observed a Japanese banker, "because the Japanese are so adept at sensing which industries require such management. Moreover, there has been a national consensus since the Meiji Restoration as to which industries are important to Japan."

An industry need not necessarily be a high priority growth one in order to be important to Japan. Even some of the *chusho kigyo* (small and medium-size industries) in the traditional sector of the dual economy

become important on occasion. They then receive a great deal of the government's attention, directed mainly towards protecting and strengthening them. But, for the most part it is the new, modern, advanced technology industries that are considered the most important. The government brings its influence to bear to help those industries grow and prosper. To this end, government works closely, cooperates, coordinates, interacts with business.

The government is also concerned that the growth be an orderly one. The rate and timing of new investment for expansion and development in a specific industry can be as important to the authorities as the amount expended for that purpose. Sometimes the government's role in the development process is a very direct one. More often, and possibly with even greater effect, friendlier types of persuasion are used. The government acts as catalyst and gadfly, guide and arbitrator, banker and patron to assure the desired pattern of industrial development.

"There is no secret to the successful management of the Japanese economy," is the view of a ranking government official well placed to comment on the subject. "A major factor in that success," he observed, "is that government and business make few major moves without consulting each other."

### **Government-Business Interaction—A Pervasive Force**

Corporate executives, business leaders, and the industry associations and other organizations which serve them, meet frequently, formally and informally, with bureaucrats for this purpose. They generally seek the government's views, often its approval, on decisions and strategies contemplated for high priority or other sectors identified as important to the economy. Firms or industries which count on government assistance, as many do, pay special attention to this requirement. Maintaining the government's goodwill is a consideration.

The Japanese authorities, for their part, are unlikely to announce programs or propose laws and regulations without first reaching a consensus with the business community or those sectors of it most likely to be affected by such government action. Some 200-300 consultative committees have been organized for this purpose. Interaction is the operative word here.

There surely are instances of this kind of interaction in the United States, let alone in Western Europe where it flourishes. The dialogue between the industry and regulatory agencies like the Civil Aeronautics Board and the Federal Communications Commission provide such examples. Airline and network executives, at the option of either party, meet frequently for discussions with their respective regulatory authorities. Their talk ranges over various aspects of the industry's operations roving



from the nuts and bolts of day-to-day operations to issues governing that industry's development over the longer run. Such discussion usually precedes major moves by either side. The regulatory agencies may have the last word, but they are often concerned that the industry understand their position and vice versa. The analogy is not a perfect one, but serves to illustrate the kind of government monitoring of the private sector that is so much more widespread in Japan.

The role of the U.S. Government in the development of our atomic energy and space programs provides another approximate example of how the public and private sector work together in Japan. These developments were largely financed and centrally directed by the U.S. Government through the Atomic Energy Commission and the National Aeronautics and Space Administration. It had to be done that way because the government set urgent deadlines for the national objectives assigned. The enormous outlays of both investment and working capital involved also indicated that it was a task only the U.S. Government could accomplish. This was especially so because of the high risk of developing and applying the new and complicated technology involved. Then too, the enormity of the task of coordinating the multi-faceted operations of the many industries and contractors and subcontractors concerned in these developments also called for the government to play such a central role. The Japanese might say that they had many comparable situations in the development of their economy.

Japan was faced with the need to quickly apply the abundance of new technology available from abroad and to create new industries. The government therefore undertook to oversee the programming and adjusting of investment and production schedules in the high priority growth industries in some prudent relation to expanding markets. The high debt-equity ratio of Japanese corporations and its control over the banking system enable the government to influence the course of industrial development. In the 50's, the government focused national attention on industries like iron and steel, coal, shipbuilding, and electric power, industries sorely needed to rebuild the economy devastated by war. The late 50's saw a shift to the heavy and chemical industries, all industries with huge growth potential. In each instance, government, always in conjunction with business interests, tried to indicate where the nation's resources could be most effectively utilized. Private interests followed the guidelines set by government with their active participation. The same sort of forced development guided the promotion of a second generation of high technology industries, like aerospace and electronics (including computers) in the 60's. In all cases, government and business maintained the closest relationship in seeing their proposals through discussion and conflict, resolution and concerted effort.

So it is the extent to which business and government interact as well as the particular style of that interaction which makes Japan different

from other Western countries. The Japanese system has been described as one in which, "a spirit of cooperation blending pragmatically the efforts of the public and private sectors" and "vigorous initiatives in both business and government circles"<sup>15</sup> provide the stimulus to growth. Indeed this interaction is so complex that it is sometimes hard to determine where business leaves off and government takes up.

## Chapter III

### The Mosaic of Interaction— Businessmen, Politicians, and Bureaucrats

政策構成

The functioning of "Japan, Incorporated" depends heavily on what one observer has called the "rolling consensus"<sup>16</sup> of the establishment which governs Japan. "Rolling consensus" is a term probably more acceptable to the authorities on this subject who question the use of the word "interaction" to describe what occurs between government and business.

Economic decision-making is dominated by the political leadership, the business community, and the administrative bureaucracy. An often influential but somewhat lesser role in this decision making is taken by representatives from academic circles, the research institutes, and labor.

The establishment determines directions for the Japanese economy and how the goals set should be reached. While positions of the various interests in the establishment may initially differ considerably on these issues, their views are usually melded through the consensual approach so prevalent in Japan. Consensus is facilitated by the closeness of the ties linking the political leadership, bureaucrats and businessmen. Members of each of these groups come from similar backgrounds; some even have family connections. Ties do not guarantee an immediate positive response from the others to an initiative from any one group. But all are willing to seek a generally acceptable position and to abide by the result. Does this mean that business and government lose their identity as entities because of the facility with which they associate with each other and agree to agree? How clear cut is the interface between Japanese business and government?

Certainly business and government are readily distinguishable as separate institutions in Japan, as they are in any other private enterprise economy. Most industry, banking, trade and commerce is in private hands. Individual businesses belong to one or more of the hundreds of industry and trade associations into which Japanese businessmen are wont to group themselves. There are national business groupings as well, akin to but in many respects more influential than the U.S. Chamber of Commerce, the National Association of Manufacturers, and the Committee for Economic Development. As used in this study, the term "business" generally refers to organized business as represented by these associations.

In this discussion business also means big business as distinguished from the myriad of small and medium-sized firms, many family owned and operated. These smaller enterprises, contrasted with the huge factories, steelworks, and shipyards of the modern sector are often characterized by only basic technology, outdated machinery, and shaky finances. For Japan has a dual economy in which many of the small and medium-sized firms referred to above serve as contractors and subcontractors to the modern industrial sector. It is these smaller companies which provide the extra capacity required by growth industries at peak levels of production. They correspondingly bear the brunt of the cutbacks required when economic activity turns downward. In the Japanese order of things, it is the small



firms which are expendable, since the larger ones are rarely permitted to go bankrupt. It is these sectors as well as agriculture from which labor and other resources have been drawn to fuel the expansion of the growth industries.

## **Bureaucrats and Politicians**

The apparatus of government is likewise clearly evident. The agency that controls the government's purse strings in much the same manner as the Office of Management and Budget in this country is the Ministry of Finance. Its concurrence is therefore necessary for programs involving financial assistance to industry in the form of both loans and tax concessions. The Finance Ministry has close links to the central bank and to government lending institutions quite important to Japanese business. It thus participates with the Bank of Japan (BOJ) in supervising the operations of the commercial banking system and has considerable influence over the commercial banks. The course of Japan's monetary and fiscal policy is another responsibility of the Finance Ministry. It drafts much of the tax legislation and passes on the tax concessions.

Businessmen in Japan come to know other ministries, including the so-called "commodity departments," even better. The Ministry of International Trade and Industry is the most prominent of these. Others, including the Ministry of Agriculture and Forestry, the Ministry of Transportation, and the Ministry of Construction, depending on the transaction, also figure large in relations between government and business. The competent bureaucrats who man this apparatus are highly visible.

"Government," of course, denotes both the executive and legislative branches of the Japanese system. Since Japan is a parliamentary democracy, the parliament, or Diet, is the sole lawmaking body of the state. But in Japan, as compared to the United States, there is a greater delegation of authority to the executive or administrative branch from the legislative. Thus the Executive Branch tends to overshadow the parliament in both power and prestige. Committees in the Diet and the LDP work closely with the Ministries concerning each legislative measure. It is the Cabinet and the Ministries, however, which usually initiate the bills, organize support in the Diet, put through the legislative program, and then administer the bills which become law.

Thus, it is the bureaucracy, the civil service, which runs the government machinery. In effect, this means that career government officials have a larger role in policymaking in Japan than their counterparts here.

Many special bills passed by the Diet endow the government departments with authority to supervise the development of various industries. Some of this authority is temporary; other bills sanction government control over certain industries like petroleum and public utilities for longer periods. The Ministries, however, do not rely on such legislative authority alone

to carry out what they conceive to be their mission. They have developed other means and techniques for asserting administrative guidance and persuasion. Nevertheless, the power base and funds provided by various types of enabling legislation are eagerly sought and prized by the bureaucracy.

The enabling legislation passed after World War II which made possible the controls on imports and foreign investment is one such case. This legislation provided MITI with legal authority to extend its power across the board, powers far more wide-ranging than that authorized in other, specific industry-oriented measures. In the case of import and investment controls, MITI officials have been understandably reluctant to relinquish such power even as the economic basis for controls has diminished.

### **Politicians and the Business Community**

While the foregoing discussion might be taken to mean the bureaucracy plays the all important role in Japanese economic development, political leaders do have a great deal to do and say about the business climate in Japan. Politicians representing the ruling Liberal Democratic Party (LDP) are basically committed to establishing a favorable business climate, but they usually operate more behind the scenes than bureaucrats to this end. They intercede with the Parliamentary Vice Minister and Bureau chiefs at various ministries, for instance, on behalf of individual business constituents. They are also quite capable of acting independently of the Ministries. Research on various industrial development and business problems carried out by LDP Diet members is often coordinated with proposals of organized business and then translated into legislation outside the normal ministerial channels.

While politicians do support legislation favored by business, this bias does not mean that the Diet automatically grants the Executive Branch the legislation it seeks. In 1963 for example, MITI was unable to persuade the Diet to pass the proposed "Bill for the Promotion of Specific Industries." The Bill would have provided MITI with very broad powers to increase the international competitiveness of designated Japanese industries. In this, as in other cases, the politicians exerted their power over the wishes of the normally dominant bureaucracy.

Contributions to the political parties much of which come from businessmen as is the case in most democratic countries also play a role in the relations between the political leadership and business in Japan. Japanese businessmen do not consider that their contributions are binding on the politicians for specific political favors. Rather through its political contributions the business community secures the right to speak convincingly with politicians, so that its thoughts and suggestions may be incorporated in the policy platforms of the party in power.<sup>17</sup>

These financial ties increase the considerable interdependence between

business and government in Japan. So does, as mentioned before, the common value system derived from shared educational and work experience, frequent social contact, and family relationships. Thus, while business, bureaucracy, and politics are distinguishable as separate institutions, this distinction tends to blur in the rolling consensus. The elements often emerge as an alliance which plots the course for the Japanese economy and directs it to the agreed upon goals.

## **Businessmen in Government—Bureaucrats in Business**

The vagueness of the boundaries differentiating government from business also results from the pervasive influence of businessmen in the government, and vice versa. Few businessmen actually enter the bureaucracy. Instead, the movement is nearly all the other way, from government into the business world. Many bureaucrats who retire, at age 55 for most, find employment in industry and banking. The shift is significant since the bureaucrats bring with them intimate knowledge of the political process and, perhaps more importantly, a web of government acquaintances of certain interest to the business community. A few retired civil servants find jobs in industry associations or in one of the Big Four business organizations—primarily in Nissho (Japan Chamber of Commerce and Industry). The others are Keidanren (Federation of Economic Organizations), Nikkeiren (Japan Federation of Employers Associations), and Keizai Doyukai (Japan Committee for Economic Development). Some bureaucrats also serve on the external advisory groups which work with Keidanren.

Businessmen, however, serve in large numbers on literally hundreds of government advisory committees which carry considerable weight and influence. They are also heavily represented in the national legislature or Diet. Nearly one-third of the Japanese House of Representatives is made up of businessmen and former businessmen. Moreover, businessmen are active on LDP working committees.

Many bureaucrats aspire to political office upon retirement. Some even become Prime Ministers. Such aspirants seek out groups within the business community who will support their candidacy for the Diet. Once elected they bring with them their connections with business developed through years of government service. Business likes these bureaucrats-turned-politicians because they are skillful in drafting plans and legislation, and they possess the ability to organize and get things done. They are usually in tune with the views and the interests of organized business. In short, they become part of the business bloc in the Diet.

The result is a mosaic of government-business interaction very different from the more familiar face-off between the two groups on the American scene. Similarities in background and in outlook often link the economic power structure in a manner which defies attempts to identify either gov-

ernment or business as the source of any particular action or interaction. Many times all three elements—businessmen, politicians and bureaucrats—appear to be members of the same group rather than divided into two camps, business and government.

These appearances can be deceiving. "Japan, Incorporated" is far from monolithic in its structure even though business and government cannot always be neatly compartmentalized. Controversy within and among the various elements may only rarely surface, but it does exist. While there is a great deal of interdependence among them, the elements of the establishment that produce the "rolling consensus" can and repeatedly do put forth independent views and positions. This gets to be more the pattern as time goes by. "Businessmen," says one of Japan's elder business statesmen, "now argue more with the government." They also argue and compete vigorously with one another. So do the government agencies. MITI, for example, frequently finds itself at odds with the powerful Ministry of Finance over the extent and timing of financial assistance to specific industries.

Different constituencies and points of view have also pitted MITI against the Bank of Japan, the Ministry of Transportation, and the Fair Trade Commission, among other government agencies. Politicians too, may tangle with bureaucrats over which firms are to be favored in the development of a particular industry.

The dichotomy between business and government in Japan may not always be a clear cut one. But the elements of the "rolling consensus," of "Japan, Incorporated," do think and act independently enough to furnish a wide range of occasions for interaction. These occasions provide the interface between the two groups. The groups interact not only to resolve differences, but to implement the measures, programs, and strategies on which they agree. How they interact, and why the system can work so well, is in many ways unique to Japan.



## Chapter IV

# The Mechanics of Interaction—Why Interaction Works So Well in Japan

世論

Some Japanologists would say that "mechanics" and "mechanisms" are much too precise terms to describe the means by which business and government are brought together, as the occasion requires, to formulate and carry out what passes for the grand design in Japan's economy. What happens really is not all that formal, these students of the subject argue. Much of the interaction is spontaneous and takes the form of informal communication between the two groups. Words can be exchanged between bankers and bureaucrats on the golf course, or between elder business statesmen and LDP political leaders in the teahouses within a short distance of the Diet Building.<sup>18</sup> These discussions, it is said, often have a greater influence on the outcome than decision-making through the complex structure of government-business advisory committees.

What these experts say may well be the case. It is difficult, however, to tell which channels, the formal or the informal, are more responsible for the degree and effectiveness of government-business interaction in Japan. Both types quite definitely contribute to the process. The close and very active ongoing relationship among the three elements of the establishment is a subtle one. The formal channels are more obvious and tangible, a fixture of the Japanese scene. They are an integral part of the process by which all the elements concerned move towards consensus on the major economic moves for Japan. Formal institutions and channels help greatly to involve business with government in the establishment of priorities for the Japanese economy. They likewise involve government with business in carrying out those priorities.

The involvement of business in Japan's economic and industrial planning does more than assure that the plans will reflect its views and knowledge. It helps make the plans more meaningful and feasible to the bankers, traders and industrialists who are largely responsible for seeing them through. Participation in the planning process in effect gives business leaders a vested interest in seeing the plans carried out.

### **Administrative Guidance—Carrots as Well as Sticks**

It often, however, takes more than this vested interest of businessmen in the results to assure that what is planned will happen. "Administrative guidance" is the expression most typically used to describe the varying degrees of persuasion that MITI employs with industry to encourage implementation of the nation's economic priorities.

The guidance that comes from government takes many different forms. The guidance in the term "administrative guidance" can be quite direct. In Japan there is still a regime, a system of controls, on a range of business activities. Japanese Government officials will emphatically point out that the control regime has diminished greatly in size since the period immediately following World War II. One high ranking bureaucrat's comment is

that "the government's dialogue with the business community now tends to be more of a horizontal (exchange of views) than a vertical (order-giving) one." That may be the case and more so with each succeeding decontrol measure taken. Administrative guidance, however, involves more than a government official passing on applications for permission to do this or that. It encompasses more than an official letter or phone call to an impatiently waiting businessman indicating that he can or cannot move the way he would like. The guidance flows out of the continuing formal and informal consultations between bureaucrats and individual businessmen, their industry and trade associations, or the leadership of the business community. The process is well described in one source.

In practice, the direction industrialization took was determined not only by granting authorizations and permits along the lines already mentioned but also means of countless suggestions, recommendations and pieces of advice proffered within the framework of the official plans and programs. While these did not in any way place private enterprise under a legal obligation, they were accepted by it by virtue of its traditionally close cooperation with the government.<sup>19</sup>

Administrative guidance also can and does cover numerous other kinds of business activities not subject to the formal control regime. The government's influence on business can and does extend considerably further than its control regime because it has other sources of leverage.

The government is not interested in using its leverage to coerce Japanese industry to its will in order to assert its primacy. Rather, the government is more concerned with achieving the goals and priorities set for the economy. The government's leverage is intended to secure business acceptance of these goals and targets. It is also used to produce consensus regarding the style, method and pace of achieving those objectives. In addition then to the more direct forms of administrative guidance, the government exerts its influence through a whole range of aids and incentives, needed, and avidly sought after, by business. These aids and incentives include financing, tax concessions, special legislation, government contracts, research and development grants, and other forms of supportive assistance. Firms which cooperate with the authorities, especially those involved in priority projects, are more likely than other less cooperative or lower priority industries to receive such government assistance. The prospect of receiving aid and assistance for prospective as well as current undertakings places a premium on a positive response from the firms concerned to the administrative guidance offered.

Perhaps again, as appears to be the case in so many aspects of government-business interaction in Japan, such a simplistic model illustrates but does not necessarily suffice. There are other, and deeper, reasons why this kind of interaction works and works so well. The Japanese setting is, in

many respects, particularly conducive to a managed economy. Japan's traditions and culture; the shared national objectives of the two groups; the manner in which both business and government are organized to communicate effectively with each other; the needs of business for government aid and support; and government's ability to meet those needs: all these factors lend themselves to a dirigiste pattern.

Japanese businessmen have always cooperated closely with their government. They have been doing so since the Meiji Restoration when the bureaucracy and the new industrialists welded themselves into a strong alliance to foster economic development. The *samurai* and others of the new managerial class who took over and expanded the industries established by the State brought with them a keen sense of national purpose and identification with the national interest. These traditional influences remain strong in "Japan, Incorporated." As noted earlier, business and government in Japan are not the adversaries they often are in this country.

Numbers of American businessmen work closely with U.S. government agencies on certain projects. In general, however Japanese businessmen are more accustomed than their counterparts here to working with the government. There is more than habit to this acceptance of the government's very active role in the Japanese economy. Businessmen there expect the government to share the risks of industrial expansion and of market development abroad. Big business looks to government as a matter of course to bail them out when need be, and to help them secure the resources, financial and other, that industrial development requires. Business also seeks government briefing on many of its major deals with foreign firms; the government arms its business people well for these dealings. Moreover, business has come to welcome certain instances of government intervention or participation in the decision-making process. This is particularly the case when, because of anti-monopoly constraints among other reasons, it might otherwise be difficult to reach the industry-wide agreement important to many business decisions in Japan.

### **Group Dynamics—The Consensual Approach**

The predilection of Japanese business for a consensual approach to policy or decision-making is a cultural trait which extends throughout Japanese society. The various interests represented in Japanese life frequently differ on all sorts of issues. But differences are usually resolved, in a way special to the Japanese, because the parties involved generally want, in fact have a need, to achieve consensus.

A number of cultural and traditional influences account for this desire for consensus. One of the most important is the group spirit that prevails in Japan. The Japanese readily identify with groups, in fact subordinate the interests of the individual to the will of the whole group. Membership



gives a Japanese in effect his identity. Japanese are therefore reluctant to break with the groups with which they have associated. Group loyalty leads them to avoid confrontation and sharp disagreements with their associates. When differences do arise, education and mediation are used to reach common ground among the group members. This consensual approach to group dynamics, typified by the *ringisho* practice<sup>20</sup>, is common to all walks of Japanese life.

What results from all this group identity and group loyalty is a strong bond to the welfare of the group. It is this concern for and pride in group achievement that motivates Japanese workers and executives alike in several large corporations to start their workday singing the company's anthem. The company's pin or emblem is also proudly worn. The ultimate loyalty, transcending all these other associations is the bond of the Japanese to their nation. A strong sense of being Japanese fuels a conscious drive to do one's best for Japan.

This group spirit contributes to the effectiveness of government-business interaction in Japan. How it does can be seen in the relationships between the elites that run Japanese business and government. The groups with which Japanese identify progress as they grow older, from family to school to university to the firm or institution that usually employs them for life. As they move from one group to another, the Japanese do not shed previous ties. If anything, those ties are cherished more. University classmates, especially, still identify strongly as members of the same group, even though over the years, as is often the case, one may have risen to the top ranks of the civil service and another to a key post in corporate management. Such connections greatly facilitate contact between the two groups, although they do not by any means guarantee an immediate meeting of the minds. Common educational and social backgrounds rather help build bridges of communication between government and business.

The Japanese culture also dictates that everyone abide by the consensus unanimously reached by the members of one's group even when this is not to one's immediate advantage. Most Japanese firms usually acquiesce even when they appear to have come off second best in the consensual decision. This attitude is even more striking to an outsider in situations where the government may have decided to favor one particular firm over others in the same industry in the allocation of certain aids and incentives. Cultural influences, however, are only part of the reason why those not favored generally accept such a decision. The fact is that there usually is a trade-off involved in most such cases. A firm overlooked in one instance in the allocation of government aid or favors generally expects that its turn will come later on. This is especially the case when that firm is one which has a record of cooperation with its industry and the government. In a growth economy like Japan's, a producer can anticipate there will be further opportunities to develop still newer markets, product lines, or specialties. And, if he has played the game, he knows

that the others in the industry, and the government, are thereby obliged to give his firm its crack at some preferential treatment in the future.

## **Grow Now, Profit Later**

Japanese attitudes toward profit and growth, closely related, also foster frequent contact between government and business. It is true that the Japanese businessman is in business to make money. But he is often prepared to defer immediate maximization of profits for longer run returns. This attitude is at least partially related to the Japanese regard for economic growth.

As one prominent Japanese businessman has put it, "The dominant opinion is that profits are linked to economic growth and that to seek only profits would create a lag in growth that would eventually affect profits".<sup>21</sup>

Thus in the interests of growth and longer-run profits, Japanese businessmen are prepared to coordinate their corporate plans in line with the administrative guidance of the government. They are perhaps more willing than their American counterparts to respond to government wishes that they adopt production and marketing strategies for the national interest. Even when following government directives means that returns will not follow quickly, the slogan guiding Japanese business seems to be "grow now, profit later."

Economic growth appears to be the central motivation of bureaucrat and businessman alike. The Japanese are usually dissatisfied and restless with the current level of performance. They tend to equate "good" with "always being new" and "becoming bigger." "Moreover, they never feel that their work is finished. The idea of something being complete or perfect does not seem to exist."<sup>22</sup>

The government, then, considers its duty to promote and encourage growth in the national interest. In pursuing a growth strategy based on economies of scale and full capacity, the government might suggest optimum plant sizes. Businessmen, for their part, attempt to expand production as much as possible, requesting financial support and other assistance from government when required. The government might assist business by protecting the domestic market for local suppliers, or it might help in developing raw materials sources or export markets.

The growth psychology, then, of the Japanese businessman leads him into strategies which demand the closest kind of business-government cooperation. He looks to the government for support, guidance, and assistance in expanding his business. The government stands ready to offer it, considering the stakes for the nation.

## Organized Business and its Dialogue with the Government

Good intentions, and shared objectives and values encourage the will of the two groups to interact with each other. Effective channels of communication and easy access to one another do a great deal to make this interaction possible. Japanese business is highly and effectually organized into industry and trade associations and various business federations. These organizations help produce a consensus of their membership regarding various issues and policies of interest and concern to an industry, a section of it, or the business community as a whole. As individuals are subordinated to groups in Japan, the interests of individual firms tend to be subordinated, through the consensual process, to that of their industry or trade associations.

There are times when the deliberations of such an association may not result in consensus. Moreover, some individual firms, especially those headed by powerful personalities or retired bureaucrats, carry on their own dialogue with the authorities. For the most part, however, the representatives of these associations, their officers and secretariat staff speak with authority and the full backing of their membership in their consultations and negotiations with government officials.

The industry association is the formal link between government and business in such matters as producer rationalization programs, capacity allocations, and export cartels. It usually has major responsibilities in the implementation of these programs. These associations also compile data and surveys that provide much useful information sought by the government to go into the planning process. The associations feed back to their membership the decisions arrived at with the government, and help implement those decisions.

Much the same is done on a broader basis, and on the larger issues, by the four major organized business groups. Chief among them is Keidanren, the Federation of Economic Organizations. It resembles the National Association of Manufacturers but is somewhat more powerful and prestigious. Speaking mainly for big business, the Keidanren leadership, the elite of the Japanese business establishment, exerts considerable influence on government policy. The most senior officials of the government often attend Keidanren meetings. Its views are frequently sought on national as well as business issues.

Nikkeiren or the Federation of Employers' Associations is generally considered the second most important of the Big Four business organizations. Its major concern has been the employers' interest in labor-management issues, although recently increasing attention is paid to questions of productivity, modernization, and rationalization in industry.

The Japan Chamber of Commerce and Industry, Nissho, is by far the oldest of the major business organizations, dating back to the late 1800's.



Nissho lobbies primarily for the interests of Japan's small and medium-size enterprises. Like Keidanren and Nikkeiren, it maintains close connections with the Diet, various ministries, and key officials from the Prime Minister down.

Keizai Doyukai, the fourth organization of this quartet, is the Japanese version of the U.S. Committee for Economic Development. Like its American counterpart, the Keizai Doyukai has had a somewhat broader agenda than other business organizations. The Japan Committee for Economic Development has been particularly interested in developing a new business ideology, one more representative of the breed of Japanese executives who have emerged since World War II.

All of the Big Four comprise the top industrial and financial leaders of Japan. They represent most, if not all, of the larger enterprises and financial institutions. Leaders and staff of each of the Big Four maintain close informal as well as formal communication with various arms of the Japanese government. Their dialogue with the government is thus a frequent and extensive one.

The views of organized business on major and basic issues facing Japan are further shaped and ordered by two groups of elder business statesmen, the *zaikai* and Sanken. *Zaikai* is the collective term meaning literally "business circles" or "financial circles" and is applied to the leaders of big business in Japan. By virtue of their position in the business world, these are usually the top executives of the Big Four economic federations. The *zaikai* are, in the words of one authority on the role of big business in Japanese politics, "organization-based, power-wielding activists," the "power structure" of the Japanese business community.<sup>23</sup> Sanken, the Industrial Problems Study Council, is a smaller and more specific group of business elitists organized only a few years ago. As most *zaikai* and Sanken representatives are also members of deliberative councils that act as advisory bodies to the various Ministries, both groups exert influence on economic policy. The business establishment has a great deal to say about the shape of the government's program and even the selection of the Prime Minister and his Cabinet.<sup>24</sup>

In their fairly frequent informal discussion meetings, Sanken and *zaikai* focus on the major issues confronting Japanese society, as well as Japan's economy. The many different points of view, motives, and interests of these business leaders tend to be harmonized within the councils of the Keidanren and the other major federations. In like manner, the views of the major economic organizations, when they differ, are sometimes harmonized within Sanken. The product is a national consensus for big business in Japan. The organized business community in Japan thus speaks with one voice on major issues and problems far more frequently than is the case in the United States. Moreover, the harmonization process, besides providing a national consensus for big business, helps Sanken and *zaikai* members transcend the narrower interests



of the corporations, banks, and organizations with which they are affiliated for a more national perspective on these issues.

For their part, government agencies like MITI are also well organized to maintain close liaison with these business groups. This happens at MITI through the government-business committee structure from the Industrial Structure Advisory Council on down. The business leaders who make up much of the membership of these committees are selected by MITI from among those who are representative spokesmen of various industry sectors. The committees are supported—and sometimes dominated—by secretariats drawn from the MITI staff. In addition, the various bureaus of MITI dealing with specific industries are responsible for maintaining close working relations with their corresponding industry and trade associations. The process is aided by the fact that the ranks of the industry and trade association staffs include many retired MITI-men.

### **Business Needs—the Government's Response**

The Japanese businessman's attitude toward interaction with the bureaucrats is influenced by his need for government support and assistance, especially in times of recession or when faced with strong international competition. That need arises from the structure of business in Japan and the scale and rate of the country's economic expansion. The extent to which Japanese businessmen seek to adjust to major shifts in market conditions at home and abroad through collective action of various sorts also increases that need.

The way business undertakings are capitalized and provided with working capital in Japan results in a debt-equity ratio unheard of in American business. That ratio averages around 80–20 and may include an even higher proportion of debt for some Japanese businesses. The famed trading companies actually operate near a 90–10 ratio. Financing investment and operations through borrowing thus becomes a very important feature of the business structure in view of the relatively small amount of equity capital that goes into Japanese enterprises. The private sector, whenever possible, therefore welcomes loans from funds at the disposal of government lending agencies and departments.

Government funds, made available from various sources, most notably the Japan Development Bank, are usually available only for high priority projects in relatively small amounts. The government's support for the project at hand, however, is most helpful in obtaining loans from the commercial banks. Japan's fourteen "city banks" with their numerous branches are closely supervised by the Bank of Japan and the Ministry of Finance. Although direct guidance is apparently not often given by the authorities to the commercial banks as to which industries or firms they should favor in their loan operations, the commercial banks seem to get

the message. Private sector lending has been especially heavy in the growth areas of the Japanese economy.

Lending by government banks can often be considered "indicative lending" in that it provides guideposts (if not guidance) to the private sector as to the government's economic priorities. In the early days of the postwar period, city banks were eager to lend money to firms favored by MITI because they appeared a safe and promising means to increased business. More important now, however, is the fact that the central bank is more likely to stand behind loans made to targetted growth industries than those with a lower priority. This is not a minor consideration for the city banks since they are generally overextended and borrow heavily from the Bank of Japan.

This channeling of funds into the growth sectors of the Japanese economy has been one of the most important and effective aspects of "Japan, Incorporated." Government loans, critics of the Japanese system charge, have often been made at rates concessional enough to classify them as subsidies. The subsidy concept is a complex one, and opinions as to what constitutes a subsidy can vary widely. Since Meiji Restoration times, however, the government has frequently given outright grants of funds to Japanese industry to enable them to achieve specific high priority objectives. These subsidies have been provided for in the national budget. The amounts provided have generally been fairly modest ones in terms of the total national budget and also of the total funding required for the project on hand. Nevertheless, they have had a catalytic effect on industrial development, providing the impetus required at crucial times by the industries or firms whose growth or structure the government wishes to influence.

These subsidies have been intended for a wide range of objectives. The development and application of new technology, the exploration and exploitation of petroleum and natural gas in and around Japan, and export promotion are but a few of these many uses. Subsidies which have helped finance imports of raw materials and the cost of new machinery and equipment are among the more traditional forms of government assistance to Japanese industry.

Business needs for cash enhance the attraction of various types of tax relief. The government is looked to for tax concessions such as corporate tax reductions for high priority industries, and special depreciation rates on new plant and equipment required for modernization. The special depreciation write-offs granted some priority industries have permitted as much as 50 percent of the cost of the new equipment to be deducted in the first year, with the remainder spread equally over the useful life of the asset. Tax concessions have thus stimulated the investment which has produced Japan's high rate of economic growth. They have also enabled some Japanese firms to finance a larger portion of their investment out of their own funds.

Government assistance and support have been essential to meet industry's demand for capital. The feverish pace and scale of economic growth in Japan has also called for large inputs of imported raw materials and technology. In some cases, these too could be obtained in the quantity and quality required only with government assistance.

The challenges of international competition both in the domestic market and abroad are yet another reason why Japanese businessmen so often enlist the aid of their government. Business seldom needs to remind government when an industry requires protection at home. This is probably true to a greater extent for the "sunrise" (new growth) industries than the "sunset" (mature or ailing) ones.<sup>25</sup> Japanese business has become conditioned to expect this kind of support from their government, and to rely on it. Likewise, when the challenge lies in a foreign market, Japanese businessmen elsewhere may turn to the government for help in export financing, or even some special type of diplomatic initiative.

Joint or cooperative action may also be industry's answer when demand has fallen because of a turn in the business cycle, or when supply has grown at too rapid a rate for the current market. In such instances, the government may be asked to sanction the formation of an anti-depression or rationalization cartel, or mergers in the industry—if, in fact, MITI has not already encouraged such action. The depression cartel recently authorized for Japan's steel industry in view of the downturn in steel demand is an example of this type of measure.

Business in Japan thus benefits greatly, may even rely heavily, on government support and assistance. It generally is not disappointed by the desire and ability of the various government agencies involved to anticipate its needs—and to fill them. While it is in the tradition of Japanese business to rely on government support, it is just as traditional for that support to be forthcoming, amply and in great variety.

The types of aids and incentives described above have long been a fixture of the Japanese economy. More recent are the growing number of quasi-governmental organizations that supplement the efforts of the ministries to develop new technology, explore and exploit new sources of minerals, and launch new industries. The Japan Petroleum Development Corporation, designed to funnel government funds and promote private expenditures in petroleum exploration, is one example of this kind of organization.

Fiscal incentives have also been used freely to encourage consumption of new products (like computers) as well as the installation of the equipment used to make them. The Japanese Government has been quite innovative in utilizing its financial, fiscal, and technical resources to encourage and promote the growth sector of the Japanese economy. The reserve and special depreciation measures mentioned have especially favored firms in growth industries. As long as those firms were investing at a rapid rate in the right types of equipment, their cash flow from deprecia-

tion was substantial. If they stopped growing or invested in the wrong types of equipment, the much needed cash flow from this source could drop off substantially.

The bureaucracy, as bureaucrats will, may not be fully satisfied with the authority or funds granted them by the Diet for assisting industry. But the Diet has been, and continues to be, while the LDP is in power, most sympathetic and responsive to the needs of business.

These aids and incentives are the "carrots" of the government's administrative guidance of Japanese business. They not only contrast with but supplement the "sticks" based on the use of the government's continuing (if diminished) authority to restrict imports and foreign investment. The government, it should be added, uses these sticks to support as well as control business in Japan. The government's use of defense in depth—import controls, tariffs, restrictions on foreign investment in Japan—to protect "infant" industries provides one of the best known examples of this kind of support. Another opportunity for government support is provided by the requirement that government approval be obtained for a joint venture or licensing agreement between a Japanese and foreign firm. The government's criteria for granting such approval can sometimes be used to yield more favorable terms for the Japanese interests involved than might otherwise have been negotiated between the two parties.



## Chapter V

# Interaction in Practice— Patterns of Establishing and Achieving National Economic Goals in the Computer, Steel and Motor Vehicle Industries

世相

It is time now to be more specific about government-business interaction in Japan. The case studies commissioned from the Boston Consulting Group for this study make it possible to do this. They furnish information and examples of what has actually transpired in the way of government-business interaction in three of Japan's most important post-war growth industries which show different profiles of development. These industries may be briefly characterized as follows:

**The Computer Industry**—Represents one of the new generation of growth industries—future oriented—largely dependent on foreign technology—a large U.S. component already in the industry—development of the Japanese component of this industry treated as an infant industry and carefully nurtured from its beginning by the government, with help and advice from the Diet and organized business.

Government-business interaction in the computer industry has been aimed at developing the industry's product range and capacity, and at increasing the share of the market supplied by Japanese producers. How to provide these producers with the advance technology required has long been one of the key problem areas.

**The Motor Vehicle Industry**—Represents a well established industry working at the growth level of the economy—passenger car development and production lagged for some time behind that of commercial vehicles—production of parts still quite fragmented—dominated by foreign producers at its beginning but wholly free of foreign capital during its growth to present prominence.

Government-business interaction in the motor vehicle industry has been devoted mostly to attempts at rationalizing the vehicle producers and their parts makers into units strong enough to maintain their share of the Japanese domestic market while capturing new ones against international competition. Controlling the entry of foreign producers, particularly the "Big Three" U.S. auto makers, has been one of the key problem areas.

**The Steel Industry**—Represents a relatively mature industry in Japan's industrial complex—a large measure of government control and intervention from the beginning—numbers of retired MITI officials included among the industry's top management facilitated government-business interaction—government's assistance, especially financial aid, vital to the industry's impressive postwar growth.

More recently, government-business interaction has been largely aimed at regulating the expansion of the industry's capacity. Despite these efforts, the overcapacity which has developed has become a nagging concern.

## **Where the Overview and Case Studies Come Closest**

The information disclosed by the case studies generally tends to substantiate the pattern of government-business interaction. The case studies do not necessarily reinforce the general description in all respects. Theory and practice come closest in at least the following aspects:

**Government-business interaction is a function of the priority attached to an industry.**—An industry must first be identified as a high priority industry before government-business interaction takes place, or intensifies.

It was not, for example, until the computer industry was recognized as of critical importance in the mid-1960's that MITI stepped up its role in that industry's development. Japan had entered the computer business in the latter half of the 1950's with a large technological disadvantage and without a strong sense of urgency. Neither MITI nor the business establishment regarded the computer industry as critical at that time. Autos and steel, among others, preempted computers as priority industries. Then two events in 1964 spurred government and business interests in developing a domestic computer industry. The first was the introduction of third generation computer technology. With it came the gradual realization that computers could make dramatic changes in all Japanese business and in the quality of Japanese life as a whole. The Japanese sensed that with the coming of computer technology a whole new age or era was dawning. The second event was the purchase by General Electric of the French computer producer, Machines Bull. This dramatically illustrated to the Japanese the inability of continental Europe to sustain an independent computer industry. As a result of these events, computers gained national prominence. Communications among MITI, the LDP, Keidanren, the industry and the financial community on the subject of computer policy increased rapidly in number and intensity.

Like computers, the Japanese motor vehicle industry for a long while took a back seat to other industries. The motor vehicle industry was permitted to develop in the late 1920's and early 1930's mainly as an offshoot of the American industry. Japan General Motors and Japan Ford dominated the market. Not even the famed and powerful *zaibatsu* combines seemed interested in making trucks, buses, or autos. For both government and industry steel, coal, and other heavy industries were of higher priority. But the picture changed drastically when the government decided that an indigenous industry had to be created to supply military vehicles for World War II. Automobile production greatly increased during World War II and the postwar period, largely on private initiative but with occasional government guidance. Then the threat of foreign capital liberalization occurring simultaneously with motor vehicles becoming Japan's largest industry brought industry and government into closer contact and discussion.

The situation was different with regard to the development of the steel industry. In that case government-business interaction was immediate; the government came on strong from the start. Steel plants were built, owned and operated by the government. The whole industry or a large part of it was directly under the government's management or control from the 1930's until the end of World War II. Government-business interaction intensified when the industry began to reconstruct and expand its plant and capacity after World War II.

**The consensual approach is emphasized in decision-making.**—The case studies repeatedly assert that the Japanese government has not at-

tempted, does not in fact have the power, to unilaterally impose its will on industry. Formal confrontation and visible exercise of power have generally been avoided, even when administrative guidance has been given.

In the computer industry, even when government had the authority to establish quotas for computer imports and tariff rates, these were set only after consultation with the industry. Prior consultation was likewise the rule when MITI exercised the authority delegated to it by the Diet (under the 1957 Electronics Industry Development Act) to instruct manufacturers to organize a cartel which would standardize the design and allocate the production of selected peripheral equipment. Cartels and other forms of administrative guidance, the computer case study points out, are not simply announced to manufacturers in Japan.

Some very elaborate consultative machinery has been established, both with and without legislative charter, to enable government and business to reach consensus on moves for development of the computer industry. Characteristically, but by no means always, bureaucrats take the initiative and convene various types of representative "deliberation councils" to produce reports recommending specific actions to advance an industry's development or to deal with problems confronting it.

The Electronics Industry Deliberation Council, which the Diet directed be established within MITI, is a fine example of this kind of consensus making apparatus. Although said to be dominated by its secretariat, the Electronics Industry Section of the MITI Bureau of Heavy Industry, the Electronics Industry Deliberation Council is still widely representative of the industrial interests involved. Outside experts, economists, physicists, and engineers are also included in this policy-making body. Problems, research topics, and ultimately policy proposals are brought before this 40 member group by MITI's Electronic Industry Section. The Council's position is announced after consensus is achieved, all differences being first harmonized within the group. The Council's position then represents a formal guideline to MITI policy.

Other types of consultative machinery are organized as the need arises. In the motor vehicle industry, when a long-term program was needed for consolidating the fragmented automotive parts industry, an ad hoc Auto Parts Committee was established. Its membership included MITI Heavy Industry Bureau officials, presidents of various auto parts manufacturers, and senior officers of the Automobile Industry Association representing the auto makers.

Ten years later, in 1966, when capital liberalization was an urgent concern of the motor vehicle interests, the auto producers' top management and LDP members established the Automobile Industry Policy Conference as a forum for exchanging policy viewpoints. The case study calls the Conference "typical of the informal, quasi-institutional forms of communication between government and business" in Japan.



Another aspect of the consensual approach in Japan is illustrated by the motor vehicle study, that is, the use of go-betweens to reconcile widely differing positions. The father of the then MITI Minister was used as an intermediary in this case. The Japanese establishment being such a tightly knit one, Dad also happened to be a close friend of the other principal involved. The meeting he arranged between his son and his friend, the Chairman of the Prince Motor Company, helped produce the result sought by the government and certain financial interests. One of the few such proposals to succeed, a merger was worked out between Nissan Motors and one of the weaker firms in the auto industry, Prince. Under these circumstances MITI's administrative guidance was well received.

MITI's role as arbitrator emerges very strongly from the steel study; Administrative guidance was used to facilitate consensus. MITI was apparently instrumental in helping the steel producers reach agreement among themselves as to the allocation of market shares and the timing of additions to capacity. The rapidly falling steel prices in 1958 necessitated MITI-industry cooperation in preparing demand forecasts. For each of the four-year forecasts the steel firms were expected to decide among themselves how much of the total increase each company was expected to undertake. Decisions were not announced until consensus was reached. If the company presidents could not agree, MITI arbitrated. Sometimes the Industrial Structure Deliberation Council was called on to assist the firms in reaching consensus. By its involvement in this consensual process, MITI removed any onus of monopoly practices on the part of the industry. At the same time, the final decision binding on the membership was in effect made jointly by the government and the industry. The steel case study notes that, while not unanimous, there is a general feeling among producers that consensus with the government on capacity decisions is desirable and prudent.

**Carrots are more important than sticks.**—The government's capacity for direct administrative guidance is apparently limited, whatever the government's penchant for such action. The government must resort to aids and incentives to direct the course of industrial development.

Direct controls appear to have been used more often and to better effect to restrict imports or foreign investment than to influence domestic producers. The reservation of the home market for Japanese producers and the virtual exclusion of foreign capital have been considered key prerequisites for the development of the computer and the motor vehicle industries. As Americans are well aware, quotas, tariffs, and commodity taxes have protected the Japanese automobile industry from foreign competition. In addition, various foreign investment laws have required government authorization for all investments by foreign capital. Particularly as regards the automobile industry, the restrictive policies on foreign investment of the post World War II era are right out of the mid 1930's. A

1952 "Basic Policy for the Introduction of Foreign Investment into Japan's Passenger car Industry" stated that when authorization had been granted, repatriation of earnings from investment in production facilities would not be guaranteed unless the investment "contributes to the development of domestic industry." In an interesting variation of the use of its control powers, MITI is reported to have threatened to liberalize computer imports in an attempt to persuade Japanese producers to consolidate their industry through mergers and other means.

MITI's control over licensing of foreign technology has also been used to influence the structure of an industry. In order to stimulate computer industry consolidation, for example, MITI announced and implemented a policy that any one Japanese computer manufacturer was permitted to conclude a technology licensing agreement with only one foreign company. For an industry highly dependent on licensed technology, this was an important consideration.

MITI also used its control over technology licensing in the motor vehicle industry. When Toyo Kogyo, third ranking auto producer, was strongly opposed to consolidation, MITI withheld its approval of the firm's application to introduce radiator technology from Renault. Subsequently MITI approved Nissan's application for the same technology, and simultaneously approved Toyo Kogyo's application. Besides its control over technology licensing applications, MITI has effectively regulated technology agreements through foreign exchange mechanisms.

From World War II until the late 1960's, MITI also maintained import controls on raw materials. MITI's power to allocate licenses for the import of coking coal was a force for reluctant or maverick steel producers to reckon with. While most import restrictions on raw materials were removed in 1965, controls on coking coal remained in force until imports of the major types of this basic steelmaking material were liberalized in October 1971.

In contrast to the limited range and often muffled use of controls and other forms of direct administrative guidance, the array and effectiveness of aids and incentives used by the government is dazzling. The case studies, all three of them, detail many instances of where and how government loans and tax concessions were granted for a variety of reasons. The discernable trend indicates that aids and incentives increased in amount and range for priority industries. All three industries—steel, automobiles, and computers—received tax exemptions, direct subsidies, and low-cost government loans when they were developing or expanding. A series of five tax and duty exemption measures enacted in 1951-52, aimed either in whole or part at the steel industry, illustrate how flexible Japan's fiscal standards can be as among various industries. Those measures allowed:

- Exemption from import duty on designated steelmaking equipment, 60 percent of which was imported at that time.

- An increase of 50 percent in the depreciation base for designed equipment.
- An additional increase in the depreciation base through a revaluation of assets.
- A tax free contingency reserve for price changes in inventories and securities.
- Additional reserves for bad debts.

The effect of these measures was to increase funds available for reinvestment from current operations, and, in particular, funds going towards specific types of investment.

More recently such measures have been utilized to encourage industrial restructuring. Government loans and tax concessions were particularly widely used to expand steel capacity and to induce consolidation of the obsolete and fragmented auto parts industry. For instance, the Japan Development Bank agreed to help finance formal mergers or cooperative production facilities in the auto industry. MITI and the Finance Ministry also secured approval of a special tax-deductible allowance that rewarded auto mergers, thereby reducing the tax liability accompanying mergers. The consensual process was given a boost at a crucial moment during the Prince-Nissan merger negotiations when the Japan Development Bank president joined the discussions and offered financial assistance to the merged companies.

Subsidies were also used to help develop new technology for the auto and computer industries, even to finance imports of raw materials and equipment for the steel industry. Through its Agency for Industrial Science and Technology, and in cooperation with automobile and electronic equipment manufacturers, MITI is currently engaged in a major R & D effort on a battery powered auto. MITI is subsidizing it at roughly \$14 million over a period of 3 to 5 years. Through the same agency, MITI has directly disseminated to all interested domestic firms the technology and know-how gained from the Agency's 1954 transistor project. While subsidies have been at one time utilized for imports of iron ore and pig iron for the steel industry, government now takes a more indirect role in raw materials procurement.

The innovative approaches to these aids and incentives, as revealed in the case studies, is also striking. The establishment of quasi-governmental organizations like the Information Technology Promotion Agency is a prime example of this kind of approach. The Agency is a joint venture between the government and six computer manufacturers to directly undertake and indirectly finance intensive development of the software component of the computer industry. Half owned by the government, the Agency qualifies for the Government Financial Investment and Loan Program and hence for Japan Development Bank funds. This enables the Agency, with an initial capital of only \$1.1 million, to make \$30 million available to its clients. Because of its quasi-governmental status, the



Agency can be staffed with experts out of industry and the universities, as well as from MITI.

The Japan Electronic Computer Corporation (JECC) is another example of innovative approaches to aids and incentives. The JECC is a joint venture of all the "Japanese" (i.e. excluding IBM) firms in the industry which purchases and leases only domestic machines. MITI and the Ministry of Finance have attempted to work out ways of minimizing the capital loss JECC members face upon repurchase of obsolete computers from the Corporation. Computer manufacturers who are members of the JECC are now permitted to establish a special reserve for losses resulting from repurchase equal to 15 percent of their sales to JECC.

The case studies confirm that direct financial assistance from the government is diverse in form, small in amount. The total subsidy awarded computers during its first five years (1957-61) was less than \$1 million, and the cumulative total through 1970 of loans, subsidy and tax savings accruing to the computer industry was less than \$25 million. The studies also point out that the real significance of the loans made by the Japan Development Bank is that they help improve the access of producers in the industries concerned to heavy borrowings from the commercial banks. This kind of "indicative lending" serves the purpose of administrative guidance to the commercial banks which, even in the immediate postwar period, rarely have been directed by the government to make loans to a particular firm or enterprise.

## **Differences in Concept and Practice**

In some respects the conceptual model, even with all the caveats and qualifications set forth, probably overstates two aspects of government-business interaction revealed by the case studies:

**Advance planning is neither as long range nor as far reaching as thought.** What happened in the computer industry is interesting in this connection. Computers is one of a group of second generation growth industries which have emerged from the drawing boards of Japan's economic planners. The stage to which it has advanced is largely the result of the careful attention and considerable efforts directed to the industry by the Japanese establishment. All elements of the rolling consensus, organized business, the bureaucrats, and the politicians, have pitched in to help create and expand the computer industry. MITI played a powerful and aggressive role in the industry's development. Studies were made, action programs proposed and formulated, and a variety of aids and incentives provided for in the initiatives taken by various groups representing all three elements. These included the LDP Diet Members Federation for the Promotion of the Information Industry, the Keidanren's Committee on Data



Processing and, of course, MITI's Industrial Structure Advisory Council Subcommittee on the Information Industry.

Yet, interestingly enough, there has not been, at least in the opinion of Boston Consulting Group's analysts, an overall strategic plan for the development of the Japanese computer industry. Rather, the planning in that industry has amounted to a series of problem solving exercises directed, as they surfaced, to issues that represented immediate roadblocks to the realization of the industry's major objective. Some of these problems arose from early ignorance about the computer industry in general. Other problems had to do with producers' financial limitations, technology gaps, and increasing the product range of the industry. Each of these obstacles had to be overcome in order to achieve the objective of developing a largely Japanese-owned computer industry capable of supplying a wide range of the most technically advanced hardware, peripheral equipment, and software.

The strategy in the computer industry was systematic. Once problems were identified, effective measures were devised to deal with them. In the absence of a longer-term plan, however, some of the action taken generated additional problems for the computer industry. The problem of securing the technology from foreign producers required to establish and expand the Japanese computer industry, for example, was solved in a manner which created an obstacle to consolidating the industry's structure. Nevertheless, numbers of shorter-run objectives were established. Some of these specific goals in the computer industry aimed at decreasing dependence on foreign technology through attainment of an independent technological excellence, at cutting down IBM's then huge share of the Japanese market, and at encouraging domestic producers through increased profits. Specific programs were recommended by the *Electronics Industry Deliberation Council Report of 1966*. These included a joint project by a number of manufacturers to build a new large computer; strengthening of the Japan Electronic Computer Corporation; rationalizing the production of peripheral equipment; and training systems analysts.

The automobile industry had its development agendas and its problem solving plans too. MITI participated in this planning, but the bureaucracy's range of policy interests and levels of involvement are described in the case study as "probably less than generally thought outside Japan." In the early 1950's automobile manufacturers and MITI prepared an overall outlook which sought protection from foreign onshore investment and motor vehicle imports, admission of foreign technology under favorable terms, and financial assistance from government. From 1956 to 1966 the Auto Parts Committee developed an auto parts program, planned in 5-year intervals, to modernize facilities and concentrate production in fewer producers.

The immediate need, rather than a long-term goal, was to create a small group of large specialized firms which could compete with American sup-

pliers. The government encouraged mergers to this end. As regards the government's rationalization plans for passenger car producers, mergers were proposed and encouraged, sometimes even with specific firms in mind, but the actual rationalizations were not specifically programmed.

Similar comments come out of the steel study. Steel was one of four industries selected for special attention in the immediate postwar period. The *Plan for Priorities in Production*, which was the first devised for steel, coal, electric power, and chemical fertilizers, was written by the predecessor of the Economic Planning Agency. Both business and government, according to the Boston Consulting Group's analysts, recognized what the postwar steel industry needed and agreed on ways to proceed. There were, as well, two crucial five-year plans which carried the steel industry through its period of greatest expansion in the 1950's. The first aimed at improving productivity through large-scale investment and introducing advanced techniques and equipment. The second plan aimed at increasing the number of plant sites and modernizing the production processes, as well as integrating production of the steel products. Yet, the steel case study points out that during all this time the government "avoided the role of central planner for the steel industry and concentrated instead on creating incentives for growth." In agreeing that the growth of the steel industry should be promoted, the main role of government was to assist in the introduction of advanced technology and machinery and to help assure the availability of financing for plant and equipment.

As in the computer industry, specific problems necessitated planned government responses. For instance, the rapidly falling steel prices of 1958 underscored the need for more orderly production. As a result, MITI and the industry began in 1959 the joint preparation of four-year demand forecasts. MITI suggested how much capacity would be needed, and industry decided among themselves how to divide up the capacity. Far from being a master plan for Japan's long-term rise to world leadership in steel production, the system was developed to meet the immediate need of better matching production with demand.

So in effect there has been short-term planning in all three industries in which both industry and government were usually involved. Such planning has been primarily in the nature of "an agenda for development." The absence of an overall longer-run plan and strategy for these vital growth industries as disclosed by the case studies is surprising and revealing as to how little of a monolith "Japan, Incorporated" really is.

**Diet and Keidanren involvement with MITI has varied considerably from case to case.**—The Diet and Keidanren played a much smaller role in the development of the steel and motor vehicle industries than they did in the computer industry.

The computer study more or less bears out the contention that MITI

worked in close cooperation with the Diet and Keidanren in planning for and carrying out the development of the industry. Reference has already been made to the consultative and policy bodies established by the LDP and the Keidanren to help chart the course for and to assist the computer industry. The Electronics Industry Development Act of 1957 provides an excellent example of this kind of cooperation. That Act, the first legislation specifically affecting computers, was prepared by MITI's Heavy Industry Bureau after lengthy consultation with members of the industry to ascertain their views and with the LDP party leadership to ensure its passage. MITI's legitimacy as the industry's leader has been based on the authority granted to it by the Act.

In 1968 the highly influential Keidanren set up a Committee on Data Processing to explore issues and recommend policy to the government. The LDP's Diet Members Federation for the Promotion of the Information Industry was also established that year to explore relevant policy questions and develop recommendations to pass to the Party's leadership. Both bodies apparently worked closely and in harmony with MITI.

The situation was quite different in the automobile industry, according to the case study. MITI dominated policy making in that industry through the late 1950's, due in part to the "docility of the postwar Diet." In 1956, MITI drafted and the Diet passed a major piece of new legislation, The Extraordinary Measure Law for the Rehabilitation of the Machinery Industry, to implement a more thorough program of financial assistance and rationalization in the auto parts industry. But apart from these legislative efforts, the Diet was not as intensely involved in the development of the auto industry as it was in development of the computer industry. In fact, when the Diet and the Keidanren became politically involved with auto issues during the 1960's, they opposed MITI's policies of delaying liberalization pending consolidation and rationalization, since continued protection had begun to adversely affect Japan's position in the international political economy.

The steel case study indicates relatively little direct involvement by the Diet and Keidanren in the postwar development of the steel industry. The Diet was, of course, instrumental in providing the funds and tax concessions so important to the steel industry's development. There probably was a great deal of legislation of special relevance to the industry's development already on the books. The Steel Industry Promotion Law, for example, the first of a series of laws providing tax exemptions for steel companies, dates from 1917. Under those circumstances, there certainly was not as much occasion or need for close cooperation between MITI and the Diet and Keidanren as in the computer industry. One interesting episode in the steel industry saga relates how organized business mobilized business opinion and support for the contested Yawata-Fuji steel merger. In that case, crucial moves were decided upon at a 5-hour summit meeting of leaders of organized business attended by the presidents of Yawata and



Fuji and their lawyers, the head of MITI's Heavy Industry Bureau, and a director of the Industrial Bank.

The case studies also indicate several areas which possibly were not given enough weight in the overview.

**MITI frequently has failed to obtain the concurrence of other government agencies.**—MITI's difficulties with other government agencies have appeared at times to exceed its troubles with the business interests involved. Japanese ministries often appear to operate a great deal more independently of the Prime Minister and each other than would be the case in this country.

The case studies mention a number of these instances. In 1950 the Ministry of Transportation, siding with passenger car users, opposed the temporary restrictions on car imports that MITI and automobile producers desired. MITI argued that the amount of foreign exchange that could be saved from restricting imports could, over a short number of years, finance domestic production and marketing facilities. But the Transport Ministry and car users desired to continue importing to meet the demand created by the Korean War. In another more recent example, the Ministry of Transportation and the Ministry of Finance supported a heavy increase in automobile purchase taxes in 1969 which were designed to accumulate funds for road construction. MITI, siding with the Automobile Industry Association, opposed the tax increase for its depressive effect on auto sales.

MITI's differences with the Ministry of Finance and the Bank of Japan are perhaps the most common of all inter-departmental conflicts. MITI tangled with the Bank of Japan over the issue of allocating funds on a priority basis to the auto industry. It was the Bank's view in 1949-51, given the scarcity of capital and the size of the reconstruction task, that development of the auto industry could wait. Procurement orders from U.N. forces for military vehicles during the Korean War changed that view. But until it was changed, the commercial banks were reluctant to proceed with the large scale financing indicated by the auto industry's expansion plans.

MITI also countered the Finance Ministry and the Bank of Japan over a similar kind of issue arising out of MITI's advice to the steel companies to expand. In general MITI was anxious to promote international competitiveness, whereas the Ministry of Finance was concerned about where the investment funds would come from, and the inflationary effect of such investment on the economy as well. MITI-MOF cooperation was, of course, essential in order to carry out the contemplated expansion of the steel industry.

But in late 1970, in the period of rising wholesale prices, the Ministry of Finance and the Bank of Japan wanted tight credit and the



steel firms wanted to increase capacity. MITI could take no aggressive stance, and decisions on capacity additions were delayed until 1971.

In another case, MITI encountered substantial resistance from the Ministry of Postal Service when MITI attempted to establish a time-sharing service for computer users. The state-owned Japan Telegraph and Telephone Corporation, which controlled the nation's telephone cable network, opposed the time-sharing scheme and defeated MITI's proposals. Only after pressure from Keidanren, the Diet, and the LDP among others, did the Ministry of Postal Service recently submit to a revised scheme.

MITI and the Fair Trade Commission have confronted one another on a number of occasions, each time because MITI favored cartels or mergers, while the Fair Trade Commission tried to uphold the Anti-Monopoly Law. The dispute over the proposed Development Law for Specific Industries is a case in point. MITI also encountered opposition from the Fair Trade Commission to the proposed Fuji-Yawata steel merger. Although the union was delayed while MITI, industry, and the Fair Trade Commission sorted out their differences, MITI finally succeeded in getting its way over the FTC.

**Industry operates on its own initiatives and without government intervention to a greater extent than thought.**—Even when high priority growth industries are concerned, private enterprise undertakings in Japan are self-starting and take many independent initiatives along the development route.

Government has been directly and heavily involved in Japan's steel industry for over 100 years. As the steel case study points out, "the small production scale and the logistics of raw material acquisition made early Japanese steelmaking decidedly uncompetitive. Private capital was not attracted in significant amounts to steelmaking until the twentieth century. The Japanese Government, in order to ensure an adequate steel supply, directly or indirectly controlled the industry for nearly the entire period from the Meiji Restoration through the Second World War."

Not surprisingly, it is the "new boys" in the steel industry, Kawasaki and Sumitomo, who have proven to be the most independent firms with the most aggressive production and marketing policies in the industry. Their independence and initiative have placed them in the maverick class on more than one occasion. Their attempts to increase their market shares, even at a time when government and the steel industry generally agreed to cut back total output, is one such instance of independent behavior. Details of this effort are included in the next chapter.

While private initiative was a long time coming in the development of the steel industry, it was present from the start in the other two industries studied. What turned out to be the "Big Two" of the automobile industry, Toyota and Nissan, were launched pretty much on their own. So,

for that matter, were the pioneers in the computer industry. Neither industry, however, acquired much momentum until the government turned its attention to its development.

Even during the period of most intensive government-business interaction activity in the development of the computer and motor vehicle industries, the structure of those industries developed fairly independently of MITI. Computer manufacturers, for example, independently entered into technical assistance arrangements with American producers. The pattern of these arrangements, the Boston Consulting Group's analysts point out, has complicated the problem of carrying forward the consolidation of that industry which MITI is now advocating. Except for some general guidelines, the automobile industry also acquired very much on its own the necessary design and production autonomy necessary to produce in 1958 the first all-Japanese designed and built passenger car. Toyota and Prince, two of the three major passenger car producers of the period, used domestic know-how exclusively. When agreements were made by the four Japanese producers who were licensees of foreign technology, negotiations had begun long before the appearance of MITI's "Basic Policy for the Technological Licensing and Assembly Agreements in the Passenger Car Industry." MITI played no direct role in the agreements themselves, other than to approve them.

Independence and initiative have been discussed in this chapter in the context of moves taken by the firms and industries largely on their own which have influenced the shape and progress of the development of those high priority industries. There have been, in addition, a number of instances when such moves were taken without the government's sanction, or in opposition to or defiance of the government's wishes. Repeated reference is made in the case studies to the government's lack of authority to impose conditions and force solutions unacceptable to the industries involved. These limitations require further emphasis.

## Chapter VI

# Perspectives on Government-Business Interaction in Japan

見通シ

Some general observations as to the *nature of the government's powers vis-a-vis industry in Japan* are important to an understanding of the limitations of government-business interaction in that country. Take the authority given to what some observers refer to as the "ubiquitous" MITI, for example. Despite its very intensive involvement in the industrial development process, MITI is only one of several government agencies with a say in the workings of "Japan Incorporated." The Ministry of Finance, which regulates the flow of funds within and outside the economy, probably has even more influence over the course of the Japanese economy, although it exercises its powers somewhat less visibly. Some experts claim that this direction over the channeling of funds is the essence of "Japan, Incorporated."

In any case, as far as MITI is concerned, that agency can, depending on the circumstances:

- Directly control inflows of certain imports and foreign capital;
- allocate direct financial assistance and indirect fiscal incentives (only with the Finance Ministry's concurrence);
- organize and finance special industry programs in technology development and production rationalization (under legislative charter and with the cooperation of its client producers).

These MITI functions are sanctioned by a varying mix of formal authority and informal consensus between that Ministry and its clients. MITI can and does find instances where it cannot direct industry to carry out its objectives. This is certainly the case with respect to formal combinations of producers—a much sought for objective in all three of the industries case studied. The government cannot effectively interpose its judgments on the corporate structure. It can encourage but not dictate mergers or formal combinations. MITI has therefore sought, generally with little success, to stimulate consolidation through its exercise of a variety of levers over industry. The case studies provides specific examples of the kinds of situations where MITI has been able to use its authority effectively and where it has not.

The *priority assigned* to the development or restructuring of an industry also determines whether and to what extent government-business interaction will take place. While pervasive, government-business interaction does not take place in all sectors of the Japanese economy, or to the same degree in those where it does happen. As the case studies corroborate, interaction between government and business has been greatest in those industries and sectors which have been assigned the highest priority in Japan's economic development. Moreover, government-business interaction has intensified at the really crucial stages of the development of a new growth industry, or the restructuring of one already well under way.

This is certainly the case with respect to the computer and motor vehicle industries. The government, indeed the whole of the Japanese



establishment, was late in recognizing the computer's critical importance. MITI had several alternative concerns of major priority during the late 1950's. Foreign exchange crises placed critical importance on developing export industries such as consumer electronics and import substitute industries like chemicals and petrochemicals. The automobile industry was just achieving design autonomy and was approaching the take-off stage. Steel was in its critical Second Rationalization period, requiring funds for massive expansions of capacity. These were among the higher policy priorities than computers. However, once computers moved into the high priority category, MITI increasingly took the initiative in its relationship with the industry and became highly aggressive both within the government's bureaucracy and among the computer manufacturers in guiding the development effort. Nor did the Japanese government take any interest in the early beginnings of the auto industry in that country until about 1930. But once they did, as the motor vehicle case study shows, the pace of government-business interaction accelerated rapidly.

In contrast to all these very busy areas are a growing number of instances where such government-business interaction as may take place has become fairly routine in nature. These cases even include several major and also a few high priority Japanese industries. It isn't that these firms and industries do not have any contact with the government, formal or informal. Most of them do, in fact, check periodically with the authorities. They do so if only to keep the government advised of their plans and operations. That would be very much in accord with the general Japanese practice of keeping in close touch and on good terms with the authorities. Yet, when things go well, even in high priority industries, the contacts between business and government can be fewer and a great deal less involved. That is also the case with industries and enterprises which may be just too small or insignificant to warrant the time or attention of the bureaucrats who monitor Japan's economic progress and development. The interests of these smaller firms and enterprises may be subsumed in some larger business grouping or association to which they no doubt belong. A group or association like the Central Federation of Small and Medium-Sized Enterprise Association is probably in close touch with the government agencies concerned. But generally speaking, government-business interaction occurs mainly where the government has a special reason for wanting to influence the development or structure of an industry.

## **Shortfalls of Government-Business Interaction**

The interaction between business and government in Japan can be terribly effective in some cases, virtually impotent in others.

MITI's efforts until now to help develop the Japanese computer industry have been largely crowned with success. On the other hand, the history

of the government's efforts since the late 1950's to restructure the auto parts and assembly sectors of the motor vehicle industry has been a chronicle of failure. It takes two parties to interact and government-business interaction doesn't always develop. Nor does the interaction that takes place necessarily accomplish what the government would like it to do. Some of the most outstanding examples of the failure of government-business interaction have resulted from government efforts to merge and consolidate firms in order to increase the international competitiveness of the industry concerned. Take the case of the attempts made to rationalize the Japanese motor vehicle industry. This objective was considered an imperative by MITI; a prerequisite before American and other foreign auto makers could be permitted to establish operations in Japan. Mergers, although not specifically programmed, were encouraged. Specific parts manufacturers were approved for government loans by the government-industry Auto Parts Committee under criteria heavily influenced by MITI. The criteria are revealing: other things being equal, large firms were favored over small firms, specialized favored over diversified, and exporting favored over non-exporting. Given the constraints of the affiliate system, MITI wanted to develop a small group of large, specialized parts firms capable of competing with American suppliers.

Even more importantly, MITI hoped to bring about a consolidation of the automobile industry into fewer and larger groups of auto producers through bureaucratic inducement. The objective was to emerge with something like a Big Two or Three with the minority share of the market producers affiliated through merger and cooperative production arrangements around Toyota and Nissan.

MITI's ambition for rationalization of the motor vehicle industry, however, exceeded the willingness and even the ability of the business interests concerned to bring it about along the lines contemplated. At one time, MITI reportedly suggested that the number of primary parts manufacturers could be reduced to 45. There presently remain over 300. The difficulties MITI encountered in its efforts to consolidate the parts sector of the auto industry were mild, however, compared to what the auto case study terms MITI's "profound" frustration in its efforts to consolidate the automobile producers.

Such efforts go back quite a way. In 1955 MITI suggested that auto producers cooperatively develop a prototype Peoples Car, then permit MITI to select one design and subsidize its production by a single privileged manufacturer. The auto manufacturers quietly but strongly objected to a subsidy for a single company and the plan never reached the Diet. This was perhaps the manufacturers' first resistance to MITI policy. Then again, in 1961 when MITI proposed to the Industrial Structure Advisory Council that passenger car production be organized into groups based on the car's basic design type, industry consensus was lacking. Toyota and Nissan offered no opposition, but the remainder of industry

objected. After a series of unsuccessful discussions, MITI dropped its proposal. One after the other, four of the six separate auto producer affiliation agreements negotiated in the late 1960's fell apart. Attempts to link Isuzu Motors with another Japanese motor vehicle producer were particularly unsuccessful. The 1966 contemplated Fuji-Isuzu, the 1967 Mitsubishi-Fuji-Isuzu, the 1967 Mitsubishi-Isuzu, and the 1968 Nissan-Isuzu agreements were never consummated. Instead, Mitsubishi chose a joint venture with Chrysler as its minority partner. Isuzu likewise linked up with an American producer, General Motors. A third Japanese motor vehicle manufacturer with a relatively small share of the market, Toyo Kogyo, is reportedly negotiating a joint venture agreement with Ford. This was not quite what MITI had in mind.

It is apparent from this record that numbers of firms in the motor vehicle assembly and parts industry, if not interested in the course urged upon that industry by MITI, certainly chose to ignore such guidance. Interaction has failed in a number of other cases where business interests proceeded their own way against official wishes. The steel case study describes, for example, the decision of Sumitomo Metals to increase its capacity and market share at a time when MITI and the other producers in the industry agreed that new investments should be made only to replace existing capacity. This was the recommendation of a special committee of the Japan Iron and Steel Federation created in 1965 to develop an investment schedule for the industry for the next five years. The committee's view was that these restraints were called for in view of the impact of the recession of 1964-65 on the demand for steel. MITI backed this majority view which, of course, also represented its position under the existing system of industry consensus under the Ministry's watchful eye. Production cartels in several product areas were in effect at the time, and the general industry pattern was to avoid price instability by moderating production levels.

Sumitomo, one of three firms then modernizing its facilities, continued its installation which technically was a replacement but which in fact meant a substantial improvement in its productivity. In addition, the firm continued to increase production while the larger producers moved more cautiously. Sumitomo has long had the most aggressive investment policy of any company in the industry. Its posture has long been to remain as independent as possible from MITI direction. Unlike other steel companies, Sumitomo assiduously avoided until fairly recently even hiring any retired MITI bureaucrats. MITI's reaction to such defiance has been a pragmatic one, and this drama is still being played out.

There are instances other than those described in the case studies which illustrate the shortfalls of government-business interaction. The prolonged attempts of the U.S. and Japanese governments to work out an agreement on voluntary control of Japanese exports of wool and synthetic textiles to this country have been attributed, in part by some observers of the



Japanese economic scene, to a failure of government-business interaction. The government has never been involved with the Japanese textile industry on the same scale as with the three industries case studied or any of the other high priority growth industries of the postwar era. Even when government was assisting the modernization of the textile industry during the 1960's, MITI's role in those programs hardly compared with its far more extensive involvement in the development of the computer industry.

### **Why Government-Business Interaction Works— When It Works**

Why then is there such a difference in the extent to which interaction takes place and is effective? Why does it succeed in some instances and fail in others? The following examples drawn from the case studies shed light on the answers to those questions.

The case studies show that government-business interaction in Japan works best when there is consensus—within industry, within the government, and between the two groups. Another major set of circumstances which determine what gets done is the strength and attitude of the client relationship between the government and the industry concerned. The computer industry, of the three industries case studied, is a notable example of the Japanese consensus of a dependent, in fact infant, industry, a powerful bureaucracy, and an urgent national priority.

Consensus between government and business in Japan can be facilitated by financial incentives which lubricate the consensual process, by MITI's role as a catalyst and initiator in developing consensus, and by the presence of retired bureaucrats in the industry concerned. Consensus, of course, also comes most easily, and is reached most frequently, when the fundamental interests of business and the government are congruent.

The influence of financial incentives—loans, tax concessions and even subsidies—upon the consensual process has already been covered in some detail in the preceding discussion. One additional example of this influence can be cited here. It has to do with the Nissan-Prince merger in the motor vehicle industry. It will be recalled from the previous chapter how the MITI Minister's father helped arrange with his friend, the Chairman of Prince Motors, a crucial private meeting. At this meeting the Minister and MITI Vice-Minister emphasized the advantages which Prince as well as Nissan would derive from the merger. This evidently was one of the ways in which administrative guidance on this matter was given to Prince's top management. In addition, the chief executive of the Japan Development Bank entered the discussions and promised financial assistance to the merger. There were, of course, other reasons, perhaps more important, as to why this merger was consummated. It served many purposes well. Not the least of these was avoiding bankruptcy for Prince which was then in a weakened financial position. Nissan also badly needed the additional



passenger car capacity which Prince's modern and under-utilized plant provided. The essential stimulus to this merger was financial rather than bureaucratic in more ways than one. The initiative for such a move came from Prince's creditors, not shareholders. So the prospect of a Japan Development Bank loan of about \$15 million proffered at such an appropriate time to the merged company certainly must have influenced the outcome. It helped the Nissan and Prince management, as well as their creditor banks, appreciate the wisdom of a merger which MITI greatly desired.

The episode also illustrates MITI's role as a catalyst and initiator of consensus. The presence of retired bureaucrats in the top management ranks of the steel industry help MITI fill this role. As previously mentioned, retired MITI-men may leave the government as vice-ministers and wind up on the board of directors of a steel company. These ex-career civil servants may lack business experience but they do provide a valuable channel of communication to the authorities. Consensus in the steel industry, at least between the government and the industry giants Yawata and Fuji (before their merger into Nippon Steel) has also been facilitated by the background and experience of other senior executives in these firms. These two producers have been managed by people who grew up in the steel industry while it was under government control. They view the industry as associated with the interests of the government and the nation. As the steel case study so well puts it,

The influence of the steel industry's traditional relationship with the bureaucracy and in fact with the broader economic policy-making community in and out of government, should not be overlooked. Their mutual recognition of Japan's dependence on steel is well-founded. Early in 1970, steelmaker's preliminary capital budgets for the next five years indicated that a full 10% of Japan's total capital investment for the period would be in steel capacity. The industry has been easily the most critical element in Japan's remarkable post-war economic phenomenon. Its impact on the international competitiveness of Japanese ships, autos, bearings, and machinery has been profound. It is at once one of Japan's biggest importers and exporters. It dominates domestic funds flow accounts much like the U.S. government dominates domestic capital markets. Recognition of its critical position has been strong. If the thesis that Japan's leaders of business and government share common perceptions of Japan's national interest has any validity, it must apply to Japan's traditional steelmakers.

As all three case studies show, consensus is easiest to come by when the interests of business and government run parallel. Consensus is not totally out of the question when interests diverge, however. When the stakes involved are not critical or the costs to business of meeting the

government's goals are not prohibitively high, consensus can also be achieved. In the early stages of the computer industry's development, for instance, both government and industry were concerned with expanding the industry's capacity and widening its product range. There also was a strong mutuality of interest in identifying and solving the bottlenecks, technological and other, as they surfaced. The interests of government and business began to diverge however, when the government concluded that some consolidation of the industry was called for. According to the president of the industry's trade association, consolidation is likely to be "naturally" evolved eventually. In the Japanese way, "naturally" means no liquidations or unfriendly acquisitions heavily influenced by MITI. It also signifies that the pattern of consolidation will be settled only after lengthy discussions with the bureaucracy, bankers, and other business interests involved.

Rationalization has also been the sticking point of government-business interaction in the motor vehicle industry. Apart from the Nissan-Prince merger, only two of the six other separate auto producer affiliation arrangements negotiated were consummated. Both these cases involved Toyota, which saw its way clear to conclude such arrangements because they would enable it to offer a larger product line. The Hino Motor Company's trucks and Daihatsu's mini cars complemented rather than competed with Toyota's.

While the degree of interaction varies by industry and according to the stage of development of that industry, it also depends on who the players are. Some industries, in fact different firms and corporate executives within the same industry, lend themselves more readily than others to the interaction process. An industry, or enterprise, may have grown and prospered, may also have established itself, without the government's help. That is entirely possible in Japan. As long as it can maintain its independence, such an industry or firm is better placed to follow a course of its own choosing than an industry dependent on the government for future as well as past support and assistance. The government's ability to influence an industry's course of action often depends on the client relationship of that industry to the government. Financial constraints and, in some cases, poor performance have been known to temper the resistance of a particular firm to the government's wishes.

It also follows that the response of many Japanese businessmen to the government's guidance is conditioned by their concern about the consequences of non-compliance. There can be a cost to alienating MITI or other government agencies. The industrialist or his company which does not comply is not necessarily likely to suffer any immediate reprisal. Retaliation is not usually the Japanese way. Nor is the government likely to take any sort of action to assert itself in a way that might slow down the rate of Japan's economic progress. Non-conformists probably will be tolerated as long as they produce the results sought for the Japanese nation.

The business establishment itself might bring pressure to bear on the mavericks to conform for a variety of reasons. But such pressure does not necessarily assure the compliance or conformity sought.

The risk, such as it is, to which non-conforming firms and corporate executives expose themselves is that the government's support and assistance may be slow in coming should that need arise in the future. The impact of the government's displeasure might register even outside the ministries. As the steel industry study notes, the lending policies of private sector banks might be influenced unfavorably by press accounts of any plans by mavericks to defy MITI and the Industrial Structure Council. That unhappy prospect can persuade some crisis-minded Japanese businessmen to follow administrative guidance. They are all the more inclined to do so since they recognize that, on the other hand, the government feels obligated to help and support those firms which have cooperated and done its bidding.

How this client relationship and concern over maintaining the government's goodwill facilitates government-business interaction can be seen in the computer case study. The Japanese component of the computer industry benefited greatly from certain aids and incentives provided by the government. Direct financial assistance, tax concessions, joint technology development, and access to the patents and know-how of MITI's Agency for Industrial Science and Technology stimulated and assisted the industry's growth. In addition, MITI encouraged compliance with its guidance through discretionary allocation of product type and quantity within a cartel, through selective approval of competitive imports, and through government procurement of computers. Boston Consulting Group's analysts point out that no computer manufacturer has elected to act independently and hence jeopardize his long-run position. The potential rewards in a market growing in excess of 30 percent annually are large.

When the Japanese steel industry was at its weakest in the immediate postwar period, the steel case study notes, the government's power vis-à-vis its industry clients quieted any differences of opinion as to which firm would be allowed to add a certain type of capacity at a given point of time. Until the late 1950's, the government maintained a great deal of control over the industry by virtue of its authority to set quotas and allocate raw materials. These weapons were little used, at least not visibly, under conditions of high market growth then prevailing. The industry's problems became more complex as MITI began to give up its powers. Firms found it harder to agree on capacity and production allocation as MITI's powers of persuasion diminished.

MITI, of course, is still far from being a paper tiger. Even a maverick in a relatively strong position, like Sumitomo, has to consider the consequences of continuing to buck the current, if its opposition or lack of cooperation is absolutely unyielding. MITI, the steel case study notes, attempted to discipline the company in 1966 by limiting its allocation of



imported coking coal to what MITI considered appropriate levels. The demand for steel recovered sharply and by 1967 Sumitomo's additional capacity was needed to meet domestic requirements. So Sumitomo never really felt the effect of this action. Nevertheless, Sumitomo has to weigh the consequences against whatever gains it may accrue by going its own way. That Sumitomo may be giving some thought to this prospect is indicated from recent reports that that firm has now hired, in an executive capacity, its first retired MITI official.

### **Some Reasons Why Interaction Fails**

It follows that if consensus among the parties concerned helps government-business interaction achieve its objectives, the lack of consensus would lead to failure. Their inability to achieve intra-governmental consensus has also forced MITI to abandon or delay putting certain of its industrial development proposals into effect. Also cited previously, were instances when other government agencies, particularly the Ministry of Finance, successfully opposed action or programs advocated by MITI. The veto power of the Ministry of Finance, over inducements to industry based on government funding or tax concessions, is very formidable.

There is another richly illustrative example of where MITI's best laid plans went awry for lack of consensus within the government as well as with industry. It has been described in the auto case study and in somewhat greater detail in other sources.<sup>26</sup> The setting is 1962, a time when most major currencies had recently become convertible, and import restrictions were being eased in other major world markets besides the United States. MITI, concentrating on improving the international competitiveness of Japanese industry, was concerned with the structure of a number of industries, autos, petrochemicals, and tires among them. MITI believed the necessary structural changes could be brought about if it was given comprehensive authority from the Diet to undertake, in co-operation with industry and the City Banks, major programs for producer specialization, establishing appropriate investment levels, and promoting mergers and groupings. A Development Bill for Specific Industries was drafted to that end by MITI. The bill further called for:

- designating strategic industries that needed special attention to help them increase their international competitiveness;
- exempting such industries for five years from the provisions of the Anti-Monopoly Act;
- extending various forms of incentives such as special tax privileges and long term, low interest loans.

Preoccupied with the need for Japanese industry to compete on world markets, the ruling LDP party's leadership strongly favored enactment of the proposed law. The Prime Minister observed that, "The Japanese automobile manufacturers will not become competitive with General



Motors and Ford under the current situation." Their endorsement, however, was not enough to carry along the Ministry of Finance. The Finance Ministry was in sympathy with the objectives of the measure but concerned lest it give MITI the deciding voice in industrial policy. Because of the existing rivalry between the two ministries, the Ministry of Finance did not wish to surrender to MITI any of its independence or freedom nor that of financial institutions under its guidance. The Finance Ministry's price for withdrawing its opposition to the Bill was to have it rewritten to relieve the Ministry and its affiliated financial institutions from any obligation to abide by the final decision of the MITI-industry-bank group as to which firms and industries should receive financial assistance.

The Bill was opposed by the Japanese Socialist Party and the Fair Trade Commission. Both were for strengthening antitrust in Japan rather than weakening it. A coalition of representatives of small and medium size businesses, farmers, and unions also joined in opposition to the proposed measure. Even the auto producers, who would have benefited under the Bill's provisions, did not favor it, for reasons which reveal much about the attitude of business toward government in Japan. According to the auto case study, some producers complained that the proposed law would extend the industry's intimacy with government beyond desirable limits; these producers did not want to jeopardize their autonomy. Moreover, there was no financial urgency, at that time, for any of the secondary producers to consolidate with each other or the Big Two (Toyota and Nissan) in order to stay in business or to finance the required growth.

In the end, the opposition proved too much. MITI made three abortive attempts to get the Bill enacted by the Diet, after strongly promoting it and lobbying on its behalf. These attempts failed for lack of consensus, among other reasons. MITI finally decided to shelve the Bill permanently.

There have been other occasions when MITI has underestimated the degree of opposition to its proposals. The fight over the Yawata-Fuji steel merger turned out to be bitter and prolonged. The Fair Trade Commission, encouraged by the opposition of many if not most prominent academic economists and other influential segments of Japanese public opinion, challenged the merger. Neither MITI nor most business and LDP leaders had attached much weight to the independence of the FTC and the strongly held belief of its chairman in antitrust policies.

The Japanese Fair Trade Commission is a quasi-judicial body independent of the Diet except for the budget and the appointment of its commissioners. Modeled somewhat after the U.S. Federal Trade Commission, its responsibility is to hear and decide violations of Japan's Anti-Monopoly Act. Though hardly a powerful agency, the Fair Trade Commission is called the fourth branch of government when it comes to the antitrust field. The merger illustrated the limits of MITI's influence

on both the FTC and the firms involved. While MITI played the role of adviser during the merger crisis, Yawata and Fuji did not follow its advice.

Lack of consensus in certain instances necessitated a change of plans, even in the development of the computer industry to which the highest priority had been attached. The establishment of the Japan Electronic Computer Corporation (JECC), which made it possible for the thinly financed Japanese corporations in that industry to establish a system of computer rentals, is one such case. As originally conceived by MITI, the JECC was to be jointly owned by the Japanese component of the industry and the government. The manufacturers opposed it because they were fearful of additional MITI leverage over their operations. The Ministry of Finance was reluctant to allocate funds for the government's equity share in the JECC. A compromise, therefore, had to be designed from which JECC emerged as wholly industry-owned, but with its operations heavily financed by loans from the Japan Development Bank.

The motor vehicle case study also raises some question as to whether consensus was ever really reached in joint government-industry planning for rationalization of the auto parts industry. It is not publically clear, according to the Boston Consulting Group's analysts, whether such plans fully took into account the independent views of the industry. These views were supposedly put forth by the auto producers and primary parts manufacturers who sat on the Auto Parts Committee and the newly appointed advisory Auto Parts Policy Research Committee. These were the consensus-making, plans-formulating bodies intended to harmonize differing points of view. MITI at that time advocated the creation of large "unit system" or sub-assembly producers. This proposal was not well received by the industry. Lack of movement in the desired direction since then does reflect a lack of interest, certainly of consensus, on the part of the motor vehicle industry in MITI's proposals. The fact was that the auto producers were not interested in MITI's plans for restructuring the auto parts sector because they were working on this problem in their own way. The auto makers considered that they were already reorganizing their parts affiliates, and reallocating production among themselves, more efficiently than would be done under the MITI proposals.

Most interesting, perhaps, of the various limitations on government-business interaction revealed by the case studies are the rigidities built into the Japanese economic system. Take, for example, the need for merging companies to obtain agreement from each of the company or "enterprise" unions involved, since each has a stake in the outcome and is concerned about losing its identity. Or the need to first disengage and then acceptably reestablish relations with the several, usually different, major commercial banks of the firms involved in the merger. The ability of Nissan and Prince to overcome these two types of obstacles characteristic to Japanese mergers helped consummate that one.

Japanese companies are generally also unwilling and unable, because

of their commitment to the lifetime employment system, to dismiss personnel made redundant by a merger or other type of affiliation. Moreover, there often is the rather delicate matter of management succession in any new combination.

Technical assistance and licensing agreements, as the computer case study shows, can also constitute an obstacle to effective government-business interaction when merger or consolidation is involved. In the Japanese computer industry each producer maintains a separate technical and licensing arrangement with a different American computer manufacturer. This would have to be taken into account in any realignment of the industry. A merger might well jeopardize the continued access of the new firm to the patents and know-how previously available to those producers party to the merger.

When the goal is consolidation or rationalization, Japanese corporate structure can also be an obstacle. Most manufacturers in the computer industry, for example, are part of multiple business corporations whose computer business is vertically related to others and not large horizontally. Along the same lines, the motor vehicle case study points out how the traditional financial and managerial relations of the assembler and parts supplier have proven to be a block to consolidation. This indeed was the case in the Prince-Nissan merger, an otherwise seemingly successful one.

Mergers are not especially attractive to Japanese firms for other reasons. There really are only two conditions which would influence a competitor to withdraw from a high growth industry; the prospect of more profitable investment elsewhere in the short run, and inability to finance the growth. The financially able and willing firm, however, will continue to invest and compete. So it was in the automobile industry that consolidation failed because of lack of financial pressure on so many of the producers, either in the form of lower profitability or higher absolute funding requirements.

A producer's opposition to consolidation can have emotional and traditional roots as well. As has been noted before, Japanese are group oriented and attached to the groups with which they are affiliated. The prospect of self-imposed production rationalization arrangements with, or formal absorptions into companies in other industrial groups can be distasteful. The status of one's company determines the range of one's potential in Japan. Because group consciousness is so intense among the Japanese, employees of Prince, the smaller company, felt looked down upon by the employees of Nissan, one of the leading car manufacturers. Engineers and executives of Prince, one student of the subject reported,<sup>27</sup> felt humiliated to be associated with Nissan employees. Thus economically reasonable actions like the rationalization of sectors of industry in Japan may often be made impracticable, or at least delayed, by social obstacles of this nature despite the government's efforts to persuade or influence the private sector to move in that direction.





Summing Up

概 括

*When all the Exceptions and Nuances of the Government-Business Relationship Have Been Taken Into Account, "Japan, Incorporated" is an Economic Fact of Life.*

The huge success of the Japanese economy rests on the initiative and entrepreneurial skill and drive of its businessmen. Their efforts have been fostered, encouraged, and enhanced at certain critical times and in key areas by the interaction of government and business, primarily big business. This concerting of the talents and operations of businessmen and bureaucrats has facilitated the channeling of resources from the mature to the growth sectors of the Japanese economy. Government and business have interacted often, in many ways, and in many areas to help maximize Japan's economic growth.

*There is a Special Style and Scope to Interaction Between Government and Business in Japan Which Makes It Distinctive.*

Some elements of government-business interaction in Japan are evident among the other private-enterprise economies of the West. There is some semblance in the industrial-military complex in the United States of the kind of government-business relationship that exists in Japan. The emphasis placed on setting priorities for the Japanese economy found its precedent in the French system of indicative planning. In a number of Western European countries, governments and highly organized business communities maintain close relations. What makes government-business interaction in Japan different from what takes place in other countries is the extent and scale of such interaction. A qualitative difference, a style peculiar to the Japanese, derives from Japan's history and culture with its emphasis on the consensual approach, a tradition of government leadership in industrial development, and a generally shared desire to advance the interests of the Japanese nation. This style is what enables "Japan, Incorporated" to merge and reconcile varying interests in so many cases.

*But "Japan, Incorporated" is not the Colossus nor the Conspiracy Between Government and Business That Its Most Severe Critics Make It Out to Be.*

It must be viewed in perspective. "Japan, Incorporated" is not a monolithic system in which government leads and business follows blindly. It is rather more of a participatory partnership. The partners work best together when there is consensus within the government, among the industry and business interests involved, and between the two groups. Such consensus is reached most easily and frequently

when the fundamental interests of business and government are congruent. When they are not, business can and frequently does follow an independent course.

*The Government Depends More on Inducements than Controls to Persuade Business to Follow a Desired Course.*

The government's direct control powers have been steadily waning. Even when these powers were at their peak, the government usually preferred friendlier types of persuasion. Indeed, in contrast to the limited range and often muffled use of controls and other forms of direct administrative guidance, the array and effectiveness of aids and incentives used by the government is dazzling. Financing, tax concessions, subsidies, technical assistance, and other inducements are often used in innovative and skillful ways. The carrots are larger than the sticks.

*Interaction Between Government and Business is Pervasive in the Japanese Economy but not All-Encompassing.*

The managers of "Japan, Incorporated" focus their attention mainly on the growth sectors of the Japanese economy. A major objective of the conglomerate to which "Japan, Incorporated" is likened is the coordination of its various component operations so as to yield the maximum return for the Japanese nation. The conglomerate's managers plan on continually shifting resources from mature to dynamic industries in order to advance the rate of economic growth. The degree and success of government-business interaction not only varies from industry to industry but in time within the same industry.

*On Balance Government-Business Interaction has been an Important Factor in Japan's Economic Growth.*

Though limited in scope and not always successful in attaining the objectives sought, interaction between government and business has contributed substantially to Japan's striking economic progress. This interaction has facilitated the development and expansion of most, if not all, of the high priority and growth industries of postwar Japan. These are the industries, like electronics, automobiles and steel, which have pushed Japan to the head of the international growth league. They are also among the industries which have made the greatest impact on the American public and the U.S. economy. "Japan, Incorporated" may thus appear to be more formidable and

wide-ranging than it actually is. But its accomplishments are very significant indeed.

*The prospects are the Government-Business Relationship will change only slowly.*

The government's direct controls over business, unless renewed, will continue to be liberalized. Moreover, the government may well be less occupied in the future with industrial development, and more with the other complex and troublesome issues that confront other more consumer-oriented economies. Changes in the fabric of Japanese society, however, which will tend to weaken the very strong cultural influences that facilitate and encourage business and government interaction in that country are less predictable. Consensus more than directives, shared objectives as much as authority, effective communications more than controls, inducements rather than commands, will continue to make government-business interaction an important feature of the Japanese economic system for some time to come.



# Footnotes

<sup>1</sup> Naohira Amaya, Director of the Planning and Policy Division, Ministry of International Trade and Industry, "Trade and Investment in Japan in the 1970's," an address to the executive conference "Perspectives on Japan" conducted by the Boston Consulting Group, Tokyo, November 4, 1970.

<sup>2</sup> Organization for Economic Cooperation and Development, *Reviews of National Science Policy-Japan* (Paris), 1967), p. 63.

<sup>3</sup> Using Japanese trade statistics with exports valued f.o.b. and imports c.i.f.

<sup>4</sup> Using U.S. trade statistics with exports valued at f.o.b. and imports c.i.f.

<sup>5</sup> Boston Consulting Group, *Business Strategies for Japan*, ed, James C. Abegglen (Tokyo: Sophia University, 1970) p. 192.

<sup>6</sup> M. Y. Yoshino, *Japan's Managerial System* (Cambridge: MIT Press, 1968), p. 162.

<sup>7</sup> MITI, Industrial Research Paper #100, "A Discussion of Cooperative Industrial Organization," quoted in Eleanor M. Hadley, *Antitrust in Japan* (Princeton: Princeton: Princeton University Press, 1970), p. 398.

<sup>8</sup> MITI Vice Minister Yoshihisa Ojimi, "Basic Philosophy of Japanese Industrial Policy," Speech before a special meeting of the Industrial Committee of OECD, Tokyo, June 24, 1970.

<sup>9</sup> Boston Consulting Group, p. 72.

<sup>10</sup> Ojimi, p. 32.

<sup>11</sup> Just how concentrated that pattern can be is illustrated in the following excerpt from page 32 of *Industrial Dualism in Japan* by Seymour Broadbridge (Chicago: Aldine Publishing Company, 1966). There was a "single minded concentration in the years between 1946 and 1956 on a few industrial sectors which were given an overwhelming priority for investment funds. Coal, electricity, marine transportation, and iron and steel were singled out for rapid expansion by both the government to adopt this lending policy. A good illustration of this concentration of investment is that in the four years from 1949-52, 90% of the funds allocated from the Counterpart Fund for fixed investment in private industry went to these four sectors. They also absorbed 43% of all loans made for fixed investment by the commercial banks to every branch of enterprise, including agriculture, over the same period. The Japan Development Bank devoted 84% of its total loans to the 'Big Four'—as these industries came to be called—in the years 1951-55, by which time both the need and the effort began to slacken off. Between 1956 and 1962 the proportion dropped to 69%, which, however, was by no means an insignificant figure. Over the whole period, 1951-62, 75% of the Bank's funds for investment went to these four industries."

<sup>12</sup> Ojimi, p. 10-11.

<sup>13</sup> "The Risen Sun," *The Economist*, May 27, 1967, p. x.

<sup>14</sup> William W. Lockwood, "Japan's New Capitalism," *The State and Economic Enterprise in Japan*, ed. William W. Lockwood (Princeton: Princeton University Press, 1965), p. 503.

<sup>15</sup> Lockwood, p. 474.

<sup>16</sup> Richard Halloran, *Japan: Images and Realities* (New York: Alfred Knopf, 1970), p. 72.

<sup>17</sup> The topic of political contributions by business in Japan is discussed in detail in: Nathaniel B. Thayer, *How the Conservatives Rule Japan*, (Princeton: Princeton University Press 1969) and Shitoshi Yanaga, *Business in Japanese Politics*, (New Haven, Yale University Press 1968).

<sup>18</sup> Yanaga, pp 11-12.

<sup>19</sup> "Export Promotion in Japan and Its Application to Latin America," *Economic Bulletin for Latin America* (United Nations Economic Commission for Latin America, XV, No. 1, First Half of 1970), p. 72.

<sup>20</sup> The *ringi* system of decision-making is widely used in large Japanese corporations, government agencies and business organizations. It enables lower echelon management personnel to obtain policy guidance from their superiors regarding decisions they must make or proposals they may have. The request for such a decision or guidance is incorporated in a document known as a *ringisho*. The document is circulated to all concerned, upward, downward and laterally in the management hierarchy. These other executives signify their approval by affixing their seal to the *ringisho* so that their concurrence can be noted when that document finally reaches top management.

Proposals or decisions of special importance are first worked out in formal meetings and informal discussions with other executives who wish to influence the decision or may be affected by it. Only then, after a consensus is reached, is the *ringisho* finally drafted and launched on its way. Thus, while proposals may sometimes be planted by top management at lower levels, middle or junior level executives are counted upon to take the initiative and coordinate the consultation and clearance process.

The *ringi* procedure can be a laborious and time-consuming one. In the process of sharing their authority and responsibility in this fashion, however, top management assures that the decision made will be understood and expeditiously carried out by all involved.

The above description of the *ringi* system is derived from excellent discussions of its origins, method, and strengths and weaknesses found in the following books: Yoshino, pp. 254-272, and T.F.M. Adams and N. Kobayashi, *The World of Japanese Business* (Tokyo: Kodansha International Ltd., 1969), pp. 80-82 85-86 119-120.

<sup>21</sup> Haruo Suzuki (Executive Vice President Showa Denko KK), "Innovation and Integration in Japanese Management," *The Journal of the ACCJ* (April 5, 1970), p. 43.

<sup>22</sup> *Ibid.*

<sup>23</sup> Yanaga, p. 32.

<sup>24</sup> *Ibid.*

<sup>25</sup> New industries are usually based on prospects in the home market. In order to attain the requisite growth in those priority industries, the Japanese consider it necessary to exclude or limit foreign competition in the domestic market. These limitations are generally applied in the early growth stages to competition either in the form of imports or of "disruptive" foreign investment. Restrictions on trade have been liberalized or eased as the industry involved has developed. Those on investment have been removed at a slower rate for reasons having also to do with the nature of the Japanese economic system as well as competitive considerations. That is, business executives not born into the culture could not be relied upon to maintain the same relations with government and each other as those who are part of the Japanese tradition. The Japanese authorities are also concerned about the relative ease with which many businesses, because of their low capitalization, could be bought out or taken over by foreign interests.

<sup>26</sup> Yoshino, pp. 185-186.

<sup>27</sup> Chie Nakane, *Japanese Society* (Berkeley: University of California Press, 1970), p. 109.

# Appendices

These case studies were prepared under contract for the Bureau of International Commerce by the Boston Consulting Group.

The studies were selected to provide examples of differing experience in government-business interaction in Japan, covering industries where information on the subject was sufficient. The three cases chosen cover government-business interaction in the development of the Japanese computer industry, the expansion of the Japanese steel industry, and the rationalization of the Japanese motor vehicle industry. They reveal how interaction may be used to consolidate as well as to expand and develop certain priority industries. They also show how interaction may be employed in varying situations to meet the challenges of international competition. Those challenges may represent a threat to the growth and position of Japanese-owned firms at home or an opportunity for them in export markets. The case studies point out instances where government-business interaction has fallen short of the mark as well as instances in which it has been immensely effective. They illustrate different techniques and methods of such interaction.

The case studies have been selected with great care. Nevertheless, they do not provide the prototypes for all the varied forms government-business interaction can take in Japan. Nor would any larger sampling of case studies necessarily fill this bill. Interaction is far too varied to be formalized. It is innovative and changing constantly in response to varying circumstances. The selected case studies, however, do furnish very specific and tangible evidence that there is a great deal of government-business interaction in the Japanese economic system. The studies also demonstrate enough about how interaction takes place to reveal a pattern.





# The Development of the Japanese Computer Industry

コンピューター

## Introduction and Summary

Only two countries in the world outside the United States and Soviet Union have domestic computer industries. One is the United Kingdom where one consolidated producer has been organized to compete with IBM and other American producers. The other is Japan. Japan entered the computer business in the latter half of the 1950's with a large technological disadvantage and without a strong sense of urgency. However, Japan's consistent desire to avoid foreign capital domination of a major industry and to develop an indigenous technology in a rapid growth sector persuaded the Ministry of International Trade and Industry to take an active and eventually aggressive role in the industry's development. The technological independence and competitive viability which Japanese computer manufacturers have thus far achieved can be in part attributed to the constructive relationship between government and the industry. The description and analysis of this relationship is the subject of this paper.

Four principal observations of the paper are summarized below.

One, MITI has played a powerful and aggressive role in developing the industry. Despite a late recognition of computer's critical importance, MITI from the industry's origins to the middle 1960's supported the computer manufacturers by underwriting technological development and providing direct financial assistance. From 1965, MITI increasingly took the initiative in the relationship and became highly aggressive both within the government's bureaucracy and among the computer manufacturers in guiding the development effort.

The protracted dependence of the industry on MITI for resources and guidance and the industry's explosive growth in production and importance have placed MITI in an extremely powerful position. While its influence over some industries has waned, MITI has unequivocally dominated the computer industry.

Two, the congruence of fundamental interests of the manufacturers and MITI has been substantial and has facilitated the development effort. The common objective of establishing an independent domestic computer industry explains the rapid convergence of thought on major policy issues from protection against foreign capital and imports to the government's participation and underwriting of technology development to the creation of unique institutions to finance the industry's growth. Only the recently confronted issue of industry consolidation has seriously divided MITI and the Industry. The resolution of that issue is now in progress.

Three, the nature of MITI's guidance has been a succession of problem solvings, not the execution of a well-conceived advance plan. The problems of foreign capital, domestic technology, financial resources, and industry consolidation arose in series, not simultaneously. Moreover, strategies in response to current problems often helped to create a future difficulty. For example, MITI's early introduction of foreign technology

from multiple sources helped create the industry fragmentation which it now seeks to redress.

Similarly, MITI's role has been one of catalyst, underwriter, sponsor and in the extreme director. It is neither appropriate nor legal for MITI to unilaterally plan and dictate the development of the Industry. Computers are a notable example of the Japanese consensus mechanism involving a dependent industry, a powerful bureaucracy, and an urgent national economic priority.

Four, the industry's development was accomplished principally by MITI and the industry. The legislative branch of government and the business community's elite played almost no role early and a strongly supportive but limited role later. The most significant obstacle to development within government—the Ministry of Posts and Telecommunications—was encountered late, by which time the computer and information industries' economic and political momentum has ensured a favorable outcome.

The mini-computer industry is not discussed in the paper.

## Origins of the Industry

**First Efforts at Development.**—The Japanese computer industry began a decade after the construction of America's first modern computer with an understandably large technological gap and a surprisingly belated recognition within the economic policy community of the machine's enormous economic significance.

In the United States, the first modern digital computer, Mark I, was constructed in 1944. Two years later the first electronic computer, Sperry Rand's ENIAC, followed. Japan's initial development effort was not until 1953 when a University of Tokyo team of scientists, working under a grant from the Ministry of Education, began assembling a vacuum tube model. In 1956, ten years after ENIAC, Japan's first electronic digital computer was constructed. Japan's continuing efforts to close that initial ten year technology gap and to protect her domestic manufacturers from its competitive efforts form the history of the relationship between government and the computer industry.

Several computer development projects were underway by the middle 1950's. The Ministry of Education's vacuum tube project lasted six years but never achieved commercial application. Japan Telegraph and Telephone Corporation developed the first computer made exclusively of Japanese componentry; however its technology, based on a unique circuit element called a parametron, did not long survive. The Agency of Industrial Science and Technology within the Ministry of International Trade and Industry (MITI) began development in 1954 of a computer logic using transistors. This project, one of many research activities within the Agency at the time, did not receive unusual priority. Eventually the know-

how developed within this project formed the basis of Japan's first commercial computers. Japan's computer industry begins with second generation technology.

The urgency of computer development was first voiced by private manufacturers in 1954. Two significant events occur in that year: the first American computer is exported to Japan and five major Japanese manufacturers begin production under license of the transistor. Nippon Electric, Fujitsu, Hitachi, Matsushita and Toshiba all manufactured sophisticated electrical equipment and wished to produce computers. Fearing domination of the Japanese market by foreign manufacturers, these companies urged MITI to accelerate the development of indigenous computer technology. In response, MITI in 1955 organized a Research Committee on the Computer. Administrative machinery appropriate to the electronics industry was not yet established, hence the Research Committee was placed within the Radio Wave Technology Association. The Committee's budget for the first year was \$2,200.

The composition of the Research Committee was typically Japanese, representing all constituencies with substantial interest. MITI officials, prospective manufacturers, Japan Telegraph and Telephone managers, and university research scientists were members. The Committee assumed two purposes: to investigate the size and nature of the technology gap and to recommend policy guidelines to the government. MITI's tasks were to rapidly educate its officials on computers and to elicit the manufacturers' willingness to pursue costly development. The Committee's conclusions anticipate and, in part, influence the direction of future policy:

- All current development activities should be encouraged.
- Foreign technology should be introduced through technical assistance and patent licenses.
- Imports of computers should be limited.

At this early time, MITI and prospective manufacturers both favored protection from foreign capital and imports, and an inflow of foreign technology. Interests are essentially congruent. However, MITI did not subsequently assign urgent priority to computers nor did the Committee really urge it to do so.

**Electronics Industry Act of 1957.**—In 1957 the first legislation specifically affecting computers was enacted. The Electronics Industry Development Provisional Act of 1957 was largely aimed at Japan's emerging consumer electronics industry. Monochrome television and transistor radio production were growing rapidly. Color television was anticipated within two years. Development of the consumer electronics industry was eminently appropriate for post-reconstruction Japan: high labor content, relatively free of imported materials, and a promising export market to complement a rapid growth domestic market. The Act was prepared by MITI's Heavy Industry Bureau after lengthy consultation with members



of the industry to gather their interests and with the leadership of the Liberal Democratic party to ensure its passage. In general, the Act formally establishes MITI's legitimacy as the industry's leader, outlines programs of financial assistance for manufacturers, and provides for their funding.

Four provisions of the Act are important for computers. First, the Electronics Industry Section is appointed within MITI's Heavy Industry Bureau to formulate policy with and for the computer manufacturers. This Section, as we see later, becomes an exceptionally active and powerful force within the government's bureaucracy.

Second, the Act establishes the Electronics Industry Deliberation Council within MITI. In 1971, the Council was renamed the Electronic and Machinery Industries Deliberation Council. Formally, the Council is the fundamental institution for industry and bureaucracy communication and planning. Effectively, the Council is dominated by its secretariat, the Electronics Industry Section of MITI.

The Council has approximately forty members including vice-ministers of the Ministry of International Trade and Industry and the Ministry of Finance, presidents of major electronics hardware manufacturers, the managing director of the industry's trade association, the president of the industry's computer renting company, and distinguished scholars. The Council is essentially a mechanism for achieving consensus. The Electronics Industry Section brings problems, research topics, and ultimately policy proposals before this Group. After consensus is achieved, the Council position is announced, representing a formal guideline to MITI policy. In fact, the computer policy positions introduced by the Electronics Industry Section have not seriously been challenged within the Council itself. Differences between manufacturers and the bureaucracy are resolved outside of the Council meeting. Formal confrontation and the visible exercise of power are avoided. Moreover, the interests of manufacturers and the objectives of MITI have largely coincided on major issues except that of rationalization and consolidation of producers. Excepting these issues, consensus usually has not been difficult.

A third feature of the Act important to computers is financial assistance to hardware manufacturers. Three categories of government assistance are established. The first authorizes direct subsidies for the research and development of promising major technologies. The second provides government loans to products just entering commercial production. The third provides both government loans and accelerated depreciation for plant and equipment investment designed to rationalize (i.e., specialize production mix by firm) operations in accordance with MITI policy. These fiscal incentives are largely designed to lubricate the consensus process and stimulate investment patterns favorable to MITI's objectives for a specific product category. The amounts are usually modest and do not finance a major portion of the manufacturer's total program. Analogies to the size

and scope, for example, of the United States' aerospace industry subsidies are not appropriate.

Computer hardware was placed within the first category (R & D subsidy) in 1957 at the urging of Fujitsu, Nippon Electric, and Hitachi. The matter was researched and discussed in the Deliberation Council, with MITI agreeing to the inclusion. The total subsidy awarded computers during the first five years (1957-61) was less than \$1 million. The major implication was not the funding but the indication of MITI's recognition of computers as an important development area. This signal to prospective creditors can be critical in a manufacturing sector whose capital is 80 percent debt.

Subsequently, computer hardware has qualified for the second and third (commercialization and rationalization) categories. Moreover, borrowings have been extended through the Japan Development Bank, a long-term credit institution within the Ministry of Finance lending to Japan's developing industries of future economic importance. Additionally, computers continue to receive research and development funds from MITI. The cumulative total through 1970 of loans, subsidy, and tax saving from accelerated depreciation accruing to the computer industry (including integrated circuit development) under this program is less than \$25 million. Other financial incentive programs are discussed later. All, however, demonstrate similarly modest sums which although not directly comparable, are far below the sums that IBM alone will spend on software development in the single year of 1971.

A fourth feature of the Act is MITI's authority to selectively exempt any portion of the electronics industry from the Anti-Monopoly Law. Cartels for controlling production, research and development activities and raw materials purchase are permitted. On this basis, MITI established in 1969 a cartel allocating the production of peripheral equipment. The origins and mechanics of the cartel are significant episodes in the industry-bureaucracy relations and are later explained in detail.

**Commercial Production.**—The recognition and financial assistance which the Electronics Industry Development Act conferred on the incipient computer industry in 1957 coincided with the successful completion of the MITI Agency for Industrial Science and Technology's transistor computer project begun three years earlier. Japan's major electrical equipment and semi-conductor manufacturers eagerly awaited the disclosure of technology from the project. The Agency did disseminate technology and know-how to all interested domestic firms. In 1957 several firms began to manufacture components. In 1958 and 1959, Nippon Electric, Fujitsu, Hitachi, and Toshiba each introduced computer models. Hitachi built a plant primarily for computers in 1959. Within two years, Oki, Matsushita, and Mitsubishi joined the industry. By 1961, the value of domestically produced electronic computers was \$13 million.

Two observations on the computer industry's development thus far are appropriate.

First, commercial production was achieved with the technical and financial assistance, not the urgent direction of MITI. The disclosed know-how of the Agency for Industrial Science and Technology provided to manufacturers the necessary technological critical mass. In addition, The Development Act provided badly needed funds and recognition collateral for additional private commercial bank funds. However, neither MITI nor the prominent business community spokesman (*zaikai*) regarded the computer industry development as critical in the late 1950's. Computers were simply not a national economic priority in 1960.

One can speculate why. On the one hand, electronic digital computers were considered by many as simply an extension of the calculator and punch card types of business machines. Computer imports, \$9 million in 1960, were not yet ominously large. Moreover, MITI had several alternative concerns of major priority during the late 1950's. Foreign exchange crises placed critical importance on developing export industries such as consumer electronics and import substitute industries like chemicals and petrochemicals. The automobile industry was just achieving domestic design autonomy and was approaching the take-off stage. Steel was in its critical Second Rationalization period, requiring funds for massive capacity expansions. There were higher policy priorities than computers.

Second, a characteristic structural feature of the computer industry today derives from early commercial production. The open access to MITI's research technology, the licensing of semi-conductor patents to several Japanese firms during 1954-55, and the emerging post-Reconstruction strength of the major electrical equipment producers all conspired to permit a large number of firms to enter the enticing computer business. As a result seven Japanese producers already shared a \$13 million domestic production level in 1961. Against this early fragmentation, IBM was then establishing a manufacturing capability in Japan.

## Foreign Manufacturers and Foreign Technology

**IBM Gains Entry.**—In 1960, Japan confronted a major barrier to the strategy of simultaneously developing and protecting its computer industry. IBM, and to a lesser degree Sperry Rand, held basic electronic data processing equipment patents to which Japanese producers desperately required access. IBM and Sperry Rand sought to establish manufacturing operations in Japan while Japan sought to exclude them.

Since enactment in 1951 of the Foreign Investment Law, foreign capital seeking to establish manufacturing activities in Japan has required government authorization. Authorization in a nonliberalized industry usually hinges on the foreign entity's serving a reciprocal Japanese inter-



est. In electronics a very substantial quid pro quo is required. IBM had a powerful bargaining tool—the ability to block Japanese computer production. After an extremely lengthy negotiation, IBM was granted permission to manufacture and foreign exchange remittance guarantees in return for licensing basic patents to all interested Japanese manufacturers. In 1960, thirteen Japanese manufacturers entered cross-licensing agreements with IBM under conventional royalty terms of payment. No know-how was exchanged. (These agreements, now with fifteen companies, were renegotiated for five years in April 1971. Royalty rates were reduced by an average of 40 percent from the preceding licensing period).

In 1963, Sperry Rand negotiated a joint venture with Oki Electric Industry Company. The company Oki-UNIVAC, is owned 51 percent by Oki and 49 percent by Sperry Rand. This Japanese majority enables the firm's computers to be officially classified as "domestic," an important distinction to which we shall return.

The licensing of IBM patents solved the legal problem but not the more substantial one of know-how. In fact, the patent resolution compounded the know-how problem. Japan, already at a technological disadvantage with imported computers, would soon face direct competition with the world's leading manufacturer at home. A situation of IBM and the seven dwarfs was materializing in Japan. Domestic manufacturers responded not surprisingly by turning to IBM's own U.S. competitors for technical assistance. Within three years of the IBM licensing agreements, today's surviving Japanese manufacturers had entered these technical assistance and licensing agreements:

Japanese Firm	U.S. Firm	Year
Hitachi	RCA	1961
Mitsubishi	TRW	1962
Nippon Electric	Honeywell	1962
Oki	Univac	1963
Toshiba	GE	1964

Fujitsu remained independent of foreign technology. Matsushita withdrew from computers in 1966, but later reentered mini-computers.

MITI's role introducing technology was largely neutral. The agreements were of course subject to standard government validation procedures for introducing technology, but these were not significant barriers. MITI's principles of no substantial foreign equity participation and no foreign control of domestic computer operations were observed by the manufacturers in negotiating the contracts. The manufacturers were evidently not advised of appropriate partners or specific terms other than above. Moreover, MITI did not seriously discourage the large number of such agreements. The fact that these agreements perpetuated the early fragmentation of domestic producers was either of little concern to the government or was justified by the value of the technology inflow which resulted. In a real sense, MITI's perspective at that time was that of the individual



manufacturer: An incremental technology inflow as desirable to MITI as it was critical to the domestic manufacturer. Industry structure was not yet an important policy concern.

**Protection from Imports.**—In 1961, imported machines claimed 70 percent of the Japanese digital computer market. IBM local manufacturing had been authorized. Technical assistance agreements with American manufacturers could only temporarily and imperfectly close the technology gap between Japan and the United States. Protection was essential to the development of a domestic industry that could eventually become technologically independent. A system of import controls and barriers was consequently developed parallel to the foreign capital exclusion apparatus. Both formal and informal import protection techniques became available to the Japanese. While the formal are straightforward and widely recognized, the informal are flexible and more interesting.

Formal protection includes quotas and tariffs. Computers and peripheral equipment are imported under foreign exchange quotas. The maximum amount of foreign exchange permitted for importing computer and peripheral equipment is established annually. This amount is determined by MITI's Electronic Industry Section after consultation with members of the industry, then forwarded to the Import Planning Sections within MITI for disposition. Computer foreign exchange allocations were raised steadily throughout the 1960's. The value of computer imports increased by a factor of ten from 1961 to 1969. Import's share of total market declined from roughly three-quarters to one-quarter over the period.

The Basic Tariff rate was raised from 15 percent to 25 percent in 1961. Currently applicable GATT rates, however, range from 15 percent on central processing units to 6 percent on standard mechanical input/output devices. Kennedy Round reductions have not been extended to computers. These tariff rates constitute a graduated disincentive to import: The rates are highest where Japan is generally least competitive. One should note that Japan's tariff valuation base is c.i.f., not the conventional f.o.b. The difference in base—international transactions costs—is considerable in the case of computers.

The Japanese techniques of discouraging non-Japanese computers go beyond tariffs, however. MITI distinguishes domestically produced computers—those manufactured by Japanese majority-owned firms—from all others. Purchases of foreign systems must be justified to MITI's Import Planning Section. If a domestic system can adequately perform the electronic data processing needs of the purchaser seeking to buy non-Japanese, it is suggested that a domestic machine be purchased. Because computers remain a foreign exchange controlled import item, the government has the mechanism to pass judgment case by case on imports. IBM units, whether manufactured in Japan or imported, are classified as foreign. Oki-UNIVAC machines are domestic through Oki's 51 percent ownership.

The purchase criteria are judiciously applied by MITI. Domestic producers do not yet market the large sophisticated machines or many special purpose systems required in Japan. Most complex data processing projects such as Japan Air Lines reservation control system, or the Japan Broadcasting Corporation's resource control and scheduling system are American installations.

Another informal technique is the credit operation of the Japan Electronic Computer Corporation (JECC), a joint venture of the six domestic manufacturers to rent computers to end-users. In Japan where 80 percent of installed computer units are rented, the manufacturer sells to the joint venture which leases to the customer. JECC, organized at the urging of MITI and controlled by domestic manufacturers, purchases and rents only domestic machines. Foreign competitors including IBM must organize their own financing. (The subject of JECC is returned to below).

One should not, however, mistake MITI's attitude toward IBM as uniformly negative. IBM currently manufactures several 370 series and 360 series models, and the System 3 in Japan. The computer technology IBM has imported to its Japanese manufacturing subcontractors and its end-users in a decade is immense. IBM Japan is easily the nation's largest exporter of computers. Moreover, IBM Japan provides to the Japanese computer interests a common performance target and provides to MITI a useful lever over the domestic producers. "IBM is already well established in the country, and special appreciation must be expressed for the stimulus it gives local makers" remarked the Director of MITI's Planning and Policy Section, Naohiro Amaya, in 1970. With roughly one-third of the Japanese computer market in 1970 in contrast to its dominating presence of the early 1960's, IBM is now a manageable and tolerable force in Japan.

### **"Japan Incorporated's" Efforts to Develop the Industry**

**Japan Electronic Computer Corporation.**—At the same time the computer manufacturers were independently entering technical assistance relationships with American producers, they were also moving collectively to solve the problem of financing computer purchases. The seven domestic manufacturers—Fujitsu, Nippon Electric, Hitachi, Matsushita, Oki, Toshiba, and Mitsubishi—were all established but not large firms to which computers represented a promising new opportunity, not an exclusive business. The combined financial requirements of their existing businesses and the development and production of computer systems were severe, even with good access to commercial bank lending. In search of assistance, the manufacturers approached MITI in 1961.

MITI, well aware of the emerging pattern of computer rentals and the great financial strength of IBM, suggested a joint venture leasing company, owned by the computer manufacturers and the government. The

debt capacity of such a semi-government joint venture would be large, including both private debt and Japan Development Bank lending. The joint venture could purchase from manufacturers and rent to end-users domestic computer systems. IBM reportedly requested partnership but was not invited.

The manufacturers welcomed the additional debt capacity but were fearful of additional MITI leverage over this operation. The government already partially controlled the funding of technology development and held potential cartel power over the industry. The manufacturers were reluctant to invite additional influence over competitive relations and marketing operations.

The semi-government joint venture proposal encountered difficulty inside the government as well. The Ministry of Finance, the government's budgeting authority, expressed to MITI its reluctance to allocate funds for the government's share. The Ministry of Finance did however wish to support the development of the computer industry. As a compromise, two measures were designed. The Ministry instructed the Japan Development Bank to provide substantial funds to the private computer rental joint venture under the Government Financial Investment and Loan Program. In addition, the Ministry supported the computer industry's qualification for partial income tax relief under an existing Special Tax Treatment Law for the benefit of strategic industries. This exemption was approved and lasted from 1961-66.

The consensual process eventually generated a jointly acceptable institution—the Japan Electronic Computer Company. JECC shares were equally subscribed by seven manufacturers. Initial capitalization was \$3 million. The Japan Development Bank provided the initial debt in 1961 and remains the single largest creditor. MITI obtained no ownership. Relations between MITI and JECC are close however. Former MITI officials hold key positions within JECC management. The Electronic Industry Section and JECC officials regularly and informally discuss matters of mutual interest.

JECC is in its eleventh year of operations. The growth of JECC has more than paralleled the rapid growth of the computer market both because of the increased use of rental facilities and the rising market share of Japanese producers. In 1970, JECC purchased over \$250 million worth of computers, over five times as many as five years ago. Its compound annual growth rate in volume since 1961 is 65 percent. The joint venture is undoubtedly a major reason for the survival and progress of the Japanese computer industry.

Such colossal growth has introduced severe problems. The obvious one is source of funds. No single creditor can maintain his proportionate funding, hence JECC must continually seek new sources. JECC currently borrows from Japanese and foreign commercial banks, trust banks, and life insurance companies. Foreign borrowing is guaranteed by the Japan



Development Bank when necessary. The funding problem will be chronic until market growth begins to level. One attempt to meet the funds problem has been to exclude smaller machines from JECC rental operations. From 1969 computers under a minimum size are not eligible for JECC financing. Roughly 20 percent of the previous computer size mix has been disqualified as a result.

A second and equally serious problem within JECC is the emergence of unequal market shares among domestic producers. From 1961 to 1964 equity subscriptions, which high growth regularly demanded, were equal among the seven members. As market shares diverged, this system became increasingly unacceptable to the small share producers who were in effect financing their competitors' computer sales. (This was a major reason for Matsushita's withdrawal from JECC).

In 1965, the manufacturers approached MITI with the problem. MITI's position was allegedly a neutral one. The manufacturers themselves constituting the JECC management agreed that subsequent equity contribution shall be in proportion to market share.

A third problem JECC members have faced is the capital loss upon repurchase of an obsolete computer. Manufacturers are obliged to repurchase at JECC book value computers returned by the end user. In the late 1960's when replacement by third generation systems was occurring, the manufacturers approached MITI for tax relief. MITI in behalf of the industry proposed to the Ministry of Finance a special reserve measure for losses resulting from repurchase whereby 10 percent of sales (to JECC) are deducted from taxable income and placed in reserve. The Ministry of Finance channeled the proposed legislation through an established system in which the Ministry acts as clearing house for the Liberal Democratic Party's Taxation System Committee. The measure was enacted in 1968. In 1969 the deduction was raised to 15 percent.

An additional interesting feature of the reserve is that it is not available to IBM Japan. The Law provides that the reserve is applicable only to computer manufacturers selling to a joint company established by three or more companies. In fact, JECC is the only computer buyer in Japan which qualifies.

**Joint Projects.**—In addition to JECC, the first half of the decade is notable for the first cooperative project among manufacturers to actually develop a commercial system. Japan's indigenous technology was particularly weak in large computers at this time. In 1962, MITI suggested to manufacturers that resources be pooled into a large computer development project. This recommendation was made in view of a typically Japanese measure enacted the year before enabling an ad hoc association of two or more firms to qualify for special government funding. Fujitsu, Oki, and Nippon Electric responded and formed the FONTAC project, which then received the sponsorship of the familiar Agency of Industrial Science and Technology of MITI. Fujitsu took the software responsibility



while Oki and Nippon Electric shared the hardware development. The project lasted three years and was reasonably successful.

FONTAC established a MITI technique for management of the industry. Although joint projects were costly to the participating firms and the distribution of benefits was not always clear, MITI's joint projects held major attractions for manufacturers. The funding was useful but not critical. Most important was the propriety of know-how developed within the project and the competitive advantage it conferred as well as the favorable relationship with MITI which cooperative firms naturally came to enjoy.

The case of Fujitsu is instructive. Fujitsu made the earliest and most major commitment to computers among Japanese manufacturers and remained uniquely independent of foreign technology, a status which became increasingly attractive to MITI. Fujitsu has participated in all major joint computer projects initiated by MITI and always has held an enviable position in them. Today, Fujitsu is one of three leading domestic manufacturers and enjoys a secure competitive position which stands immune to current restructuring or consolidation efforts in the industry.

**A New Recognition.**—1964 is a pivotal year in Japan's computer industry. The events of that year triggered a widespread reassessment of the Japanese position and led to major changes in strategy. Two events are critical.

IBM introduced the system 360 and with it the third generation of computers. The design and capability of the third generation represented a quantum advance in data processing technology. The technology gap between Japanese and American producers was, if not effectively increased by the third generation, clearly and dramatically announced to the leaders of Japanese government and business.

The impact of the third generation on Japanese economic policy makers cannot be overestimated. It was, of course, widely recognized in Japan that domestic technology was underdeveloped. Japanese industry had faced that problem during postwar years in other industries and usually overcame it by purchasing then improving the foreign technology. The startling fact of the third generation was that computer technology was accelerating, that the pace of system design and performance advances was not leveling off, and that the gap between domestic and foreign producers might very well increase over time.

This accelerating technology posed a new challenge to Japan. The country's modern sector has been developed largely from imported technologies which were either reasonably stable or in a state of declining innovation. Steel, synthetic fibers, autos, petrochemicals, and consumer electronics in part are examples of a fundamentally similar strategy. Technology was imported at prices which, given the alternative cost of domestic development, were exceptionally low. Domestic producers

preempted that share of world growth represented by Japan's large and rapidly growing market. Aggressive use of debt to help finance growth coupled with a technologically mobile, well-trained and relatively low cost labor force enabled domestic producers to grow rapidly. Eventually Japan gained a technical parity with competitors abroad and translated its superior cost position and financial strategies into substantial exports.

It is neither likely nor material that policymakers in 1964 foresaw this sequence applying to computers. It is significant, however, that after 1964 computers were seen by the leaders of government as a fundamentally different kind of industry. Manufacturers and MITI's Heavy Industry Bureau were largely aware of this difference at an early date. However, recognition was not widespread among the top levels of government and the business community until the foreign third generation systems were announced and being installed in Japan's largest banks.

The second critical event of 1964 is the purchase of the largest French computer manufacturer, Machines Bull, by General Electric. The inability of continental Europe to sustain an independent computer industry in the face of American competition helped Japan to recognize the importance of scale for survival and the necessity of protecting the domestic manufacturers in view of their serious size and technology disadvantage. The evidence appears to vindicate the Japanese position. Today Japan and the United Kingdom are the only countries, except the United States and the Soviet Union, which have a significant independent domestic computer industry. The U.K. industry survived only by consolidation of several manufacturers into a single national firm, International Computers Ltd.

The small scale and market share fragmentation of Japanese computer operations was a problem at this time and remains so. The value of Japan's computer production in 1964 was less than \$100 million. This production was shared among eight firms including IBM. Of the seven domestic firms, only Oki-UNIVAC was primarily in the computer business. Computers at that time did not approach one-third of corporate sales in any of the other six. While this low share of corporate sales is not surprising in a new business, the small scale and fragmentation of production among the seven in light of IBM's dominant position placed the survival of the domestic industry in serious doubt.

The period following the introduction of third generation and the purchase of Machines Bull was one of recognition and reassessment for the Japanese. The Liberal Democratic Party and the Keidanren developed for the first time a knowledgability and serious policy interest in computers. The Electronics Industry Section and the Bureau of Heavy Industries became highly influential within MITI in representing the priority due the computer industry. Communication among the elements of government, industry, and the financial community on the subject of computer policy increased rapidly in number and intensity. This was assisted by the gradual realization that computers would in the future have a dramatic if not

revolutionary impact on the conduct of all business. The dawn of Japan's computer mentality occurs at this time.

The policy implications of the events of 1964 became obvious and can be arranged into three areas. First, the development of domestic technology, particularly large system software, must be accelerated. Second, the small scale and fragmentation of the industry must be overcome by either formal consolidation of producers or increased joint activity and formal organization of the market. Third, the impact of computers on business and the potential of electronic data processing must be understood.

**The Deliberation Council Report of 1966.**—The interest and urgency with which the computer was viewed after 1964 encouraged the Bureau of Heavy Industries to become aggressive in its stewardship of the industry. From this period, not only does the computer industry become one of highest priority, but the Bureau becomes extremely active. One can argue that the initiative for development which often, although not always, had previously come from the manufacturers now began to pass decisively to MITI. Certainly the position of the industry at the time dictated an aggressive role for MITI. The industry was badly structured to effectively compete with the Americans. The technology gap was beyond the capacity of single firms to close. Moreover, the industry was now seen as a critical one for Japan's economic future.

At this time, the Electronics Industry Deliberation Council became correspondingly active. It had previously served as an official though not always effective channel for MITI-industry interaction and had prepared industry position papers and five-year plans. A systematic industry strategy was now required however, and MITI called upon the resources of the Deliberation Council to help it develop and approve one. The result was the Electronics Industry Deliberation Council Report of 1966, the most important document in the industry's history.

The report first confirms the computer industry as most important to Japan's future then outlines a series of objectives and programs. The objectives are, briefly, an independent technological excellence, an increased domestic market share, and a gradual rise in profitability of domestic producers. The programs offered are several and include a joint project to build a new large computer, strengthening JECC, rationalizing production of peripheral equipment, and training systems analysts. All of the report's major programs have been fully or nearly fully implemented.

This successful result was not surprising. MITI conceived the programs and ensured the support of the industry before the report was released and before budget requests were sent to the Ministry of Finance. The report of course is a joint document, the combined efforts of MITI and the industry and reflects both interests. The report's programs are thus limited to those where the congruence of MITI's and the manufacturers' basic interests is high and to those issues where, despite divergent inter-



ests, the stakes are not critical and hence the costs of manufacturers' compliance not prohibitively high. Consequently the critical issue dividing the two and one on which MITI's thinking was beginning to take new shape—the restructuring or consolidation of the industry—did not find a prominent place in the report. This fact is important in understanding the consensus process. At the time, resolving the structure issue was not essential to MITI and inimical to consensus. Consequently, the issue was not explicitly surfaced and the report's programs remained mutually acceptable.

The measures outlined in the report enjoyed considerable support within the Ministry of Finance and the Liberal Democratic Party. Appropriations which had been small in amount and aroused little interest now became important in size. The budget for research and development subsidies under the 1957 Act was four times larger in 1967 than in 1960. Japan Development Bank Loans to JECC in 1967 were five times higher than only four years before. The scale of Japan's commitment to the computer industry rose significantly.

The interesting interaction of government and business, however, lies in the implementation, not the budgeting of the measures. Two major programs which grew out of the report—the Large Scale Project and the Peripheral Equipment Cartel—are considered in the remainder of this section.

**The Large Scale Project.**—Probably Japan's weakest computer technology at this stage was in the area of large memory, fast compute-time hardware and supporting software. The Deliberation Council's report identified this problem and prescribed joint efforts to solve it. The third generation of American computers had reopened the technology gap, and in response MITI conceived a massive joint project to design and build a system similar to a late model in the IBM 360 series. The target was the Large Scale Computer, capable of providing time-sharing service to Japan in the early 1970's. The project, sponsored by the Agency of Industrial Science and Technology, was scheduled for six years and \$33 million in government funding. The project is behind schedule.

In designing the project, MITI matched the six participating companies and the tasks carefully. Fujitsu, Hitachi, and Nippon Electric were asked to build critical hardware—memory and central processing unit—and develop the very difficult operating system software. Toshiba and Oki were asked to build time-sharing peripheral equipment. Mitsubishi did not join the project. Matsushita had withdrawn from the industry.

This allocation of tasks reveals MITI's new concern with the structure of the industry. The major tasks and those conferring the competitive advantage of critical know-how were awarded to the three leading and most viable producers. In addition, MITI sought to anchor their favored software position by establishing the Japan Software Company—a joint



venture of Hitachi, Fujitsu, and Nippon Electric—to develop the operating system and program packages for the Large Scale Computer. Japan Software is the largest software house in Japan today. Toshiba and Oki, asked to develop peripheral equipment, were encouraged to slowly withdraw from mainframe hardware competition and concentrate on dominating the peripheral market. Up to this point, there had been little specialization among firms in computers and related equipment, a circumstance which exacerbated the fragmentation problem.

The manufacturers all answered MITI's call although with some reservation. To summarize, the leading producers recognized the know-how advantage the project gave them collectively but were uncertain of the eventual benefits to each individually. In particular, the question of which would commercialize the Large Scale Computer at the end of the project was important but unanswered. The cost of internal resources devoted to the project was high. Toshiba and Oki of course recognized the longer-term rationalization implications but found no more attractive alternative to participating on MITI's terms.

**The Peripheral Equipment Cartel.**—The fragmented industry structure became an increasing concern to MITI policymakers after the Deliberation Council Report of 1966. By 1968, each of the six surviving manufacturers were approaching self-sufficiency in equipment and component production. Each producer was attempting to supply his own mainframe, components, and peripheral hardware in assembling computer systems. MITI now clearly saw the problem as one of too many producers. Commercial production of computers was now ten years old, and there was still no evidence, excepting Matsushita's withdrawal, of any competitive shake-out, product specialization, or consolidation among domestic producers.

One should not mistake the state of competition in the industry at this time. The manufacturers' heavy dependence on MITI for development assistance and their participation in joint financial and development ventures did not reduce the competition among producers in existing computer markets. In Japan, there is a clear distinction between, on the one hand, cooperative efforts toward industry development or market organization by the bureaucracy and the industry and, on the other, self-motivated cooperative efforts among the manufacturers toward these same ends. Japan's antimonopoly legislation prevents, in general, manufacturers from allocating markets, fixing prices, regulating capacity, and other practices in restraint of trade. However, under the cognizance of bureaucracy and if necessary under the specific exemption of antimonopoly legislation, industries collectively do cartelize markets, establish price policy, and authorize capacity additions. These activities are organized and usually directed by the bureaucracy.

In 1969, MITI moved to limit the competition of domestic manufacturers in peripheral equipment. Exercising its delegated authority under the 1957 Electronics Industry Development Act, MITI instructed manufacturers to organize a cartel to allocate the production and standardize the design of selected peripheral equipment.

Cartels, as other forms of administrative guidance, are not simply announced to manufacturers in Japan. MITI approached the manufacturers with the idea informally and through the Deliberation Council. There was little doubt of course that MITI would get an effective cartel and that the manufacturers would not want it. However, MITI did elicit the manufacturers' positions on who should produce what and on the mechanics of the cartel's operation. The cartel itself, embodied in a rather descriptively titled measure called Law Providing Temporary Measures for Promotion of the Electronics Industry, permitted MITI and the industry to allocate specific products among one to three producers.

The selection of products to be cartelized is interesting. MITI insisted on the inclusion of standard peripherals whose design had stabilized and where further innovation was remote. Failure to concentrate their production made little economic sense. Hence, seven types of punched card and paper tape equipment were cartelized in 1969. Line printers and magnetic drums were added a year later. MITI was less convinced that technologically unstable peripherals should be rationalized, fearing that productive development activities might be cut off. The manufacturers clearly wanted to exclude these, in particular sophisticated input/output devices, from the cartel. They were, in fact, excluded. A third category—electronic components—were produced by all six manufacturers. Components were in most firms distinct and valuable businesses, the control of which was beyond the objectives of MITI. These were excluded as well.

The control mechanism of the cartel is a steering committee of the manufacturers. The committee monitors and controls the production levels which were set by MITI and the industry. The committee can punish violators but this is a trivial and redundant deterrent. There have been no violations and none are likely. The obligation of the manufacturer to observe the terms of the collective agreement to which he assented is a strong one.

A deterrent of a different nature and persuasion is the fear of MITI reprisal. It is highly improbable that a computer manufacturer would have seriously challenged MITI during this period. The potential rewards in a market growing in excess of 30 percent annually are large. Challenging or ignoring the government's guidance could deny a manufacturer access to MITI's several benefits—joint technology development, direct financial assistance and tax exemption, and access to the Agency for Industrial Science and Technology's patents and know-how. Alternatively MITI can ensure compliance through its discretionary allocation of products within a cartel or through selective approval of competitive imports or through

its own purchases of computers. In the computer area, MITI has enjoyed a strong position resulting from both the infancy of the industry and the bright future of the market. No manufacturer has elected to act independently and hence jeopardize his long run position.

**The Information Industry Arrives.**—If the arrival of the third computer generation in the middle of the decade thrust the computer industry into public attention, it eventually triggered an even greater discussion of the applications and uses of the machine. By vastly enlarging the potential applications of electronic data processing, the third generation stirred the imaginations of some public policy bodies and produced new responsibilities for others. An information industry, loosely defined but including large data processing organizations, software suppliers, and joint government-business agencies, came into recognition if not into actual being at this time. This new concern produced considerable activity at high levels of government and industry, and eventually brought about the most dramatic consensus episode in the industry's history.

MITI's Bureau of Heavy Industry was the pioneer not surprisingly. In 1967, MITI established the Information Industry Room within the Bureau responsible for intelligence and policy in that area. In addition, an Information Industry Subcommittee was organized within the Industrial Structure Deliberation Council, one of the most powerful advisory and executive groups within MITI. The Subcommittee is counterpart to the computer manufacturer's Deliberation Council.

As a first step, MITI in 1967 encouraged the six computer manufacturers and JECC to establish a Japan Information Processing Development Center. Its charter, literally translated, called for the Center to launch "the information industry with a great dream in it." The Center was established despite a jurisdiction dispute among the bureaucracies which kept computer time-sharing service off its agenda. Its activities ranged from sending an information industry survey mission to the United States to undertaking the data processing responsibility for Expo '70 to establishing regional data processing centers in Japan. The Center, MITI's first program in the information sector, was strategically designed to increase the visibility of the sector and demonstrate its possibilities.

The following year the Keidanren and members of the Diet formalized their interests. The highly influential Keidanren set up a Committee on Data Processing to explore issues and recommend policy to the government. Meanwhile, 160 Liberal Democratic Party members of the Diet formed the Diet Members Federation for Promotion of the Information Industry. The Federation's purpose is once again to explore relevant policy questions and develop recommendations to pass to the Party's leadership.

Within this context of high level interest, MITI sought to establish consensus on some major policy objectives and then move aggressively



with appropriate programs. MITI had two critical policy interests in the information area. One was the accelerated development of third generation software and, in particular, diversified user programming packages (user software). The other was the establishment in Japan of a time-sharing service. With these interests firmly in place, MITI played the role of catalyst and initiator in developing consensus among leading elements of government and business.

The convergence of thought on software was rapid and enthusiastic. The report of the Special Survey Group to the United States stimulated enormous interest and discussion in Japan. The Keidanren's Committee on Data Processing held hearings on the nation's data processing needs and surveyed its members on their information problems. The Committee's eventual recommendations were explicitly supportive of major programs on a national scale. The Diet's Members Federation submitted six different studies outlining the data processing potential in areas from government information systems to education. Formally and informally, these interests were communicated to the government.

In 1969, MITI directed the Information Industry Subcommittee to prepare a major report. This report, like that of the computer industry's Deliberation Council three years before, was to enunciate objectives and major programs. While MITI controlled the document's preparation, it reflected a strong consensus among manufacturers, the business community, the Diet, and the bureaucracy. It urged action in three major areas: software development, personnel training, and time-sharing.

Implementation of the software priority was swift. MITI proposed a joint venture between the government and six computer manufacturers to directly undertake and indirectly finance intensive software development. Eight years before, MITI had proposed a similar joint venture for computer rental financing and failed. This time, the proposal gained wide acceptance, including the Ministry of Finance, and the government invested a 50 percent share. The majority of the venture's funds underwrite internal software development while the remainder become guarantee deposits at large private long term credit banks to secure loans to private software companies. This overcomes the inability to borrow of new software houses, whose only assets are cerebral.

The venture, named the Information Technology Promotion Agency, additionally qualifies for the familiar Government Financial Investment and Loan Program and hence for Japan Development Bank funds. The Agency enjoys dramatic financial leverage. With an initial capitalization of only \$1.1 million the venture will make possible to its clients over \$30 million in debt financing during 1971, its second year of operation.

The Agency has permitted the software business to blossom in Japan. There are roughly forty private software houses at present, the majority having been formed in the last eighteen months.

The second major policy area of the Subcommittee's Report—person-



nel training—was also rapidly implemented. The government established an Information Technology Institute to train systems analysts and programmers. The Ministry of Education has a massive program underway which includes seven regional computer training centers located at universities.

The report's third major policy area and one of MITI's two critical interests—time-sharing service—experienced a far more dramatic road to implementation. In 1967, MITI had unsuccessfully tried to launch time-sharing service in Japan through the Information Processing Development Center. Time-sharing, which connects a large number of remote users simultaneously to one large computer, requires access to the nation's telephone cable network which in Japan is, by law, the exclusive province of the Japan Telegraph and Telephone Corporation. JT & T, seeking to monopolize data processing transmission and hence time-sharing, resisted the MITI plan. The telephone utility, hampered by inadequate revenues from its telephone operations and by technological isolation, had been unable to develop an operable time-sharing system and chose not to relinquish control of the lines. Six months of negotiation between MITI and the Ministry of Posts and Telecommunications (MOPT) which represented the utility ensued. The law was on the side of the telephone company, and MITI was forced to withdraw its plan.

The first stage of the dispute was, to MITI's disadvantage, conducted with little outside influence. The issue evidently was not well understood outside the two Ministries. The initial defeat indicated to MITI that the issue must be brought into the public domain. Early in 1968, MITI began to aggressively do just that.

The arguments for liberalization of the nation's telephone lines were strong and the statute which reserved them to the telephone company and hence blocked alternative time-sharing services was obsolete. The response within the government and business communities was strongly supportive of MITI. Keidanren's Committee on Data Processing called for liberalization, noting that MOPTS's position was retarding the growth of an important industry and denying the business community a valuable service. The Diet Members Federation, then recognized as a convenient magnet for campaign funds as well as an articulate spokesman for the information industry, adopted a resolution calling for liberalization and pressed the matter with the Party's leadership. The pressure for reform grew. MOPTS offered to sponsor a change in the law permitting case-by-case liberalization, but this was widely regarded as inadequate. Finally, after a period of informal discussions and mutual recognition of the inevitable, the Liberal Democratic Party's Policy Deliberation Council suggested a compromise.

The compromise, currently before the Diet and nearly assured of passage, liberalizes the circuits on a more or less automatic approval basis effective September 1972, giving the telephone company a lead time to

develop its service. In addition, the telephone rate structure was revised to give the telephone company major new sources of revenue. MITI, on the other hand, gained for its clients the opportunity to operate private time-sharing systems. A number of interesting schemes have already been announced including the group syndicate concept whereby Mitsui, Sumitomo and other groups of companies will share computer facilities within the group.

## **Restructuring the Industry**

The structure of the computer industry is presently the single most urgent question facing MITI's Electronics Industry Section. Since 1957, the government and industry have cooperatively approached and largely resolved the issues of capital and import protection, financial resources, domestic technology, and an information industry. The fundamental interests of MITI and the manufacturers have been identical throughout. Despite its belated recognition of the computer's critical importance, MITI increasingly took the initiative and became an aggressive and dominant leader of the industry's development. The problem of structure—the climatic issue of the industry's development phase—represents a departure from this context. The fundamental interests are not congruent and MITI's initiative is constrained by the nature of the problem. At this writing, the structure question remains unresolved.

MITI views a partial and early consolidation of the industry as essential for two reasons. One is international competitiveness. Six partially backward-integrated manufacturers producing overlapping systems for a domestic market a fraction of the U.S. size cannot effectively compete with large, technologically superior American producers in third markets or even in an unprotected home market. Only one major Japanese producer, Fujitsu, has a computer business accounting for half of corporate sales. Among the three remaining major firms of Hitachi, Nippon Electric, and Toshiba, computers are neither the leading nor second leading business in size for any one. MITI considers a specialization of development efforts and a significantly larger scale of production for any single model as prerequisites for exporting. (Japan's current computer exports are negligible excepting IBM's.) The precise form the consolidation might take is a problem discussed below.

The computer's importance to Japan's export strategy lies not simply in increasing the volume exports but in diversifying the markets. The political necessity and economic desirability of partially redirecting the one-third of total Japanese exports currently going to the United States suggests that computer exports, in view of the American producers' superiority, be focused on Europe and Asia. Continental Europe, without a domestic industry and dominated currently by American subsidiaries, may

within five years emerge as a major export market for Japan, simultaneously perhaps with Japan's export competitiveness in computers.

MITI's second interest in consolidation is reducing the opportunity for foreign capital investment as capital liberalization of computers becomes not only inevitable but imminent. The automobile experience must have amply demonstrated to MITI the hazards of liberalization of a major industry while marginal but still hopeful producers remain. Anticipating the authorization of foreign equity in newly established automobile joint ventures, three marginal producers—Mitsubishi, Toyo Kogyo, and Isuzu—will permit Chrysler, Ford and General Motors to acquire ownership shares ranging from 20 to 35 percent in their existing companies. This attempt by secondary producers to gain competitive advantage through the purchase, at the price of equity, of American technology, capital and distribution facilities abroad suggests that a similar attempt is possible in the computer industry. The attraction of continued rapid growth of the computer business and the relative technology positions of the secondary Japanese producers certainly raises the possibility.

The salient feature of MITI's concerns over structure is its international perspective. The preoccupation with third market competitiveness, discouraging foreign capital investment, and designating specific export complements MITI's policy concern, throughout the industry development effort, with import and capital protection of this high growth industry's market. The recognition implicit in Japan's antitrust policy of the domestic structural requirements for international competition is an important ingredient in this perspective.

Obstacles to consolidation in its several forms are numerous and powerful however. The computer producing firms are traditionally independent, highly competitive, and proud. Precedent for permanent joint activity is not to be found. Moreover, as long as growth remains high, market shares will be unstable and the opportunity to gain relative competitive position—and hence future profitability—will attract major resource commitments. Competitors usually withdraw from an attractive high growth business for one of only two reasons: investment decision criteria oriented to short run profitability or inability to finance the growth. Matsushita's withdrawal in 1966 was a case of the former. Toshiba's position today is perilously close to the latter.

Not all of the producers' opposition is voluntary. The computer industry has an unusually large number of structural barriers to consolidation. There are first the typical Japanese barriers to formal consolidation such as the inability and unwillingness to dismiss redundant personnel under a lifetime employment system and the difficulty of disengaging and acceptably re-establishing relations with the firms' major commercial banks. In addition, the manufacturers are multiple-business corporations in which the computer business is vertically related to others and horizontally not



large. These circumstances discourage computer operation spin-offs and simple corporate mergers respectively.

Moreover, computer manufacturers maintain elaborate technical assistance and licensing agreements with American producers. These agreements which ten years ago were accepted by MITI as sources of necessary technology are now clearly obstacles to restructuring the industry. These agreements illustrate, as do the earlier open access to the Agency of Industrial Science and Technology know-how and the joint technology development projects, the essentially pragmatic course MITI has taken in its industry development effort. MITI's assistance has been far more a succession of problem solvings than an orderly execution of an advance plan. Successively MITI has responded to its early ignorance with a Research Committee, to the producers' financial limitations with joint ventures and government assistance involving all manufacturers, to technology gaps with multiple foreign technical assistance arrangements, and finally to the resulting fragmentation with production cartels and encouragements to consolidation. No one in government or industry acknowledges that there was ever a master plan, a designed sequence of actions and results. The evidence supports that observation.

Early in 1971, MITI announced its desire to see domestic manufacturers accomplish a four group structure: Fujitsu, Hitachi, Nippon Electric-Toshiba, and Oki-Univac-Mitsubishi. MITI is of course unable to affect structure directly. In the computer industry, it can provide administrative guidance for relations among firms such as joint ventures and cartels. But it cannot effectively interpose its judgments on corporate structure; it can encourage but not dictate mergers of formal combinations in this industry. Consequently, MITI has sought to stimulate consolidation through exercise of its several levers over the industry.

One approach is technological. MITI is now seeking to translate the merger of U.S. manufacturers into Japanese consolidation by announcing that the number of Japanese companies having technology license agreements with any one foreign company will be limited to one. MITI can effectively regulate technology agreements through the foreign exchange control mechanisms; hence this is a credible policy position. The targets of course are Nippon Electric and Toshiba which currently maintain individual agreements with Honeywell and General Electric.

Another approach is financial. MITI has thus far ignored the requests of JECC over the past eighteen months that the government enlarge its financial assistance. A favorable MITI response will probably first require a JECC recapitalization favoring the dominant producers and a change in present rules of access to JECC funds which give all producers equal access.

Another approach may be through the reallocation of production within the cartel where the product mix patterns MITI assigns would anticipate those of eventual voluntary producer tie-ups. This same princi-



ple of production allocation would presumably apply to any future joint development ventures organized by MITI.

Some early steps have already been taken by the producers, but the precise form which the industry will eventually take is still highly uncertain. The inevitability of capital liberalization, the growing financial requirements of competing, and serious technological gaps have brought about some production tie-ups during 1971. Toshiba has moved close to Nippon Electric, and Hitachi and Fujitsu have begun cooperating on the development and production of large systems. Of the four companies' computer efforts, Toshiba's is the most uncertain of survival and could become increasingly dependent on NEC. Fujitsu and Hitachi, both brilliant companies and leading computer manufacturers,\* are not likely to enter permanent and comprehensive arrangements.

Whatever computers' future, it will be interesting and tenuous in light of American competition. Structure is a critical question. Kenichiro Komai, President of Hitachi and the industry's trade association, has remarked that the restructuring will be "naturally evolved." He means, of course, naturally Japanese: no liquidations or unfriendly acquisitions, heavily influenced by MITI, and finally settled only after lengthy discussions with the bureaucracy, bankers and other related companies.

#### **PROFILES OF JAPAN'S MAJOR DOMESTIC COMPUTER PRODUCERS**

(Data for Year Ended March 31, 1971)

	<b>Hitachi</b>	<b>Fujitsu</b>	<b>NEC</b>	<b>Toshiba</b>	<b>Mitsubishi Electric</b>
Corporate Sales <sup>1</sup>	2,191	423	691	1,666	1,102
Total Assets <sup>1</sup>	2,455	516	816	2,025	1,330
Profits after tax	78	28	33	31	23
Paid-in Capital <sup>1</sup>	338	79	111	257	151
Profit as % sales	3.6%	6.7%	4.8%	1.9%	2.1%
Annual growth (5 yr. average)	22.5%	24.2%	23.8%	22.1%	18.0%
Computer's Est. Share of Corporate Sales	15%	55%	30%	8%	5%
Employees	93,577	26,323	35,678	78,114	58,156

<sup>1</sup> Value in thousands of dollars.



**The Rationalization of the  
Japanese Motor Vehicle  
Industry**

自動車

## Introduction and Summary

The conventional wisdom of economics argues that sustained protection of an industry will, by insulating domestic producers from the rigors of international competition, jeopardize its production efficiency and long run performance. The case of Japan's automobile industry challenges this thesis, for two characteristics of its development from pre-war infancy to currently emerging maturity clearly stand out. One is its enormous growth and competitive success. Japan's present annual passenger car production exceeds three and one-half million units, up by a multiple of one hundred over fifteen years. Japan's auto sector is now the world's second largest, and its export penetration of the largest auto market—the U.S.—has been impressive, if not alarming. The other characteristic is the comprehensive structure of protection from foreign imports and capital investment which was developed at an early stage and has only recently been fundamentally altered. Together, these facts confound the traditional logic.

This commitment to sustained industry protection is one dimension of the relationship between government and the auto industry which this case study explores. Every major episode in the history of this relationship from the initial decision to develop a domestic industry through the introduction of foreign capital is reviewed. What emerges in the end is a view of this government-business interaction which is rather different from the typical conceptions of the foreign observer and which offers little support to the monolithic, "Japan Incorporated" hypothesis of Japanese economic decision-making.

Three principal observations of the study are raised in summary.

First, the relationship between the bureaucracy of government and the automobile industry is a long one. It dates from the late 1920's and early 1930's when the early dominance of Japan General Motors and Japan Ford and the necessity of providing military vehicles persuaded the Japanese government to take an active development role. It was during this prewar period that Toyota and Nissan were born of private capital while Japan's powerful *zaibatsu* rejected auto production as speculative. It was also during this period that foreign auto producers onshore were closed down by successive legislation, a prohibition which has remained effective until 1971.

Second, the industry's relations with MITI have been both cooperative and adversary. While the two readily agreed on the necessity of protection and jointly defended its several forms until the very end, consensus on other critical policy issues was difficult and often impossible. MITI and the industry were usually opposed on both questions of the necessity and the form of producer consolidation. MITI attempted, largely unsuccessfully, to concentrate the fragmented industry into three, then two large producer groups. The industry generally resisted this strategy, and, despite the few consolidations which did occur as a result of competitive and financial pressure, Japan faced auto capital liberalization at the end of the



1960's with three major independent producers behind the dominant Toyota and Nissan. The three eventually tied up with the United States Big Three, climaxing MITI's failure.

Third, unanimity within government on auto policy was not always forthcoming. Major disagreements among elements of the economic policy community arose over several issues, including the immediately postwar question of whether to develop an auto industry at all, MITI's ambitious proposed legislation of the middle 1960's to consolidate the industry, and the crucial issue of the capital liberalization at the close of the decade. In each instance, MITI's position was in aggressive support of the auto industry sector. The other Ministries—Transportation and Finance—responded to a larger constituency, either the Japanese consumer or the Japanese economy. The Diet and Keidanren, which became politically involved with auto issues during the 1960's over the issues of consolidation and liberalization, opposed MITI's policies when continued protection began to adversely affect Japan's position in the international political economy.

## **Prewar Role of Government**

**Origins of the Industry.**—The active role of the Japanese government in the automobile industry is not simply a recent phenomenon. The origins of the domestic auto industry actually lie in the government's response to the requirements for Japanese military strength and economic autonomy during the first four decades of the century. This obscure prewar history is important in understanding the more notable recent interaction—both cooperative and adversary—of the government and the manufacturers. For the prewar history introduces the major issues—the threatening presence of foreign capital, the viability of domestic producers, the problem of foreign exchange, and the appropriateness of fiscal incentives—which dominate the government-industry milieu during the postwar period.

Despite the dramatic growth in passenger car demand in the 1960's, activity did not occur until the first World War. The demonstrated maneuverability of automobiles in combat induced the government to directly subsidize the development and production of military vehicles, almost entirely trucks. Commercial use of trucks soon followed, and production continued after the war's end while passenger cars remained undeveloped. In fact, trucks dominated Japanese automotive output until very recently. Despite the dramatic growth in passenger car demand in the 1960's, annual passenger car unit production surpassed combined truck and bus output in Japan for the first time in 1969.

Ironically, a natural disaster gave the first impetus to Japan's auto business, but domestic producers were unfortunately not in a position to take advantage. Tokyo's great earthquake of September 1923 crippled the

city's railway and tramcar system. One thousand buses were shipped from Ford in the United States. The passenger vehicle opportunity had arrived in Japan, but only the American producers could respond. Domestic manufacturers were very small-scale, primitive in production technology, and severely undercapitalized. Automotive production in 1923 is estimated at less than two hundred units.

Within two years, both Ford and General Motors established wholly-owned onshore assembly operations. Japan Ford Corporation was formed in Yokohama in late 1924. Japan General Motors, headquartered in Osaka, followed in 1925. By 1929, the two companies combined produced nearly 30,000 automobiles. Parts and sub-assemblies were imported from the United States for domestic assembly. Each organized a finance company and introduced the installment purchase in Japan. Within five years of their coming, Ford and General Motors controlled 85% of the Japanese market with onshore production.

Throughout this same period, Japanese domestic production remained dormant. The Japanese government, despite its wartime subsidy of military vehicles, had not demonstrated serious interest in a domestic industry. Japanese manufacturers remained inferior in scale, technology, and capital. Their combined annual production never exceeded 500 units before 1930. Quite apart from Japan's early competitive disadvantage, automobile production was considered by both government and major industry to be speculative and of lower priority than steel, coal, and other heavy industry. The powerful and diversified *zaibatsu* of Mitsubishi, Mitsui, and Sumitomo separately considered and rejected entry into the automobile business. Each worked constructively with the Japanese government and undertook major investments in other areas where mutual interest was strong. Autos, then, residually fell to the strictly private, small-capital sector.

**Initial Efforts at Development.**—A change of attitude, at least by government, began to emerge around 1930. In that year, the Ministry of Commerce and Industry—the predecessor of the Ministry of International Trade and Industry—instructed its Domestic Industries Promotion Committee to study the future of the automobile industry and the implications of domination by foreign capital. In the following year, a formal automobile industry committee was established. During the next five years, the Ministry's view of a domestic auto industry shifted from one of moderate desirability to strong necessity. Strategies for protection and development were formulated, and by 1936 major legislation aimed at forcing Ford and General Motors out of Japan was prepared.

Three major stimuli toward this new position are suggested by the events of this period. The first and obvious influence is Japan's growing territorial ambition in Asia. Domestic production of all vehicles in 1932 was still under one thousand units, hardly enough to support the military

expansion. Production rose by a multiple of thirty-five over the next six years, a feat directly related to military needs. However, the preoccupation of the Ministry of Commerce and Industry was not wholly military.

It was apparent that onshore foreign capital, if permitted unlimited production levels, would continue to dominate the domestic market and hence preclude the development of Japanese producers. The domestic manufacturer faced an uncompetitive scale of operation, an inadequate assembly technology, an absence of onshore parts supply, and an inability to finance automobile purchasers at competitive terms. The high failure rate of small domestic producers and the continued unwillingness of the *zaibatsu* to compete, even at later invitation of the government, convinced planners that protection from foreign capital was the prerequisite of a domestic industry.

This fundamental conclusion was never later seriously questioned in Japanese government or industry. While there was serious postwar debate within government over the necessity of a domestic automobile industry, the first requirement of development—protection from foreign capital—was uniformly confirmed. Similarly, the recent year's dialogue within the Japanese economic policy community over capital liberalization of the industry was a debate over the domestic producers' stage of completed development, not a requisitioning of the necessity of protection for development.

A third stimulus to the government's reconsideration of autos was the foreign exchange problem. The international monetary crises and trade dislocations of the late 1920's and early 1930's dramatized Japan's precarious import position. Lack of a domestic automobile industry meant importing either finished vehicles or knock-down parts for assembly by onshore foreign capital. Both require foreign exchange.

The problem was not merely one of foreign exchange shortage, however, but rather the perverse cyclicity which import dependence forced on the Japanese economy. Japan has a high dependence on imported basic material, and until the past few years experienced a chronic deficit on current account in her balance of international payments. Throughout Japan's industrial history, this circumstance has meant a built-in macro-economic instability: as income cyclically rose and combined basic material and manufactured imports rose in proportion, the resulting foreign exchange deficit required a deflationary countercyclical monetary policy. Japan's modern economic history fully documents this pattern. The implication for domestic industrial policy was that import-substitute manufacturing industries must be developed. A domestic automobile assembly and parts industry substantially reduces the net imports per automobile. This reduction is compounded by the secondary domestic production effects of autos on the steel, machinery, and tire industries. These implications were not lost on Japan's economic strategists, particularly as military production requirements rose.



The impact of this new government position on domestic automobile production was felt in the middle and late 1930's. It was felt most keenly by Ford and General Motors. In 1936, the government enacted the Automobile Manufacturing Enterprise Law, which literally and comprehensively aimed at closing down foreign producers onshore. Its provisions were of two varieties—advantages to domestic producers and disadvantages to foreign producers. Among the former, it exempted government-licensed manufacturers from income tax for five years, rebated import customs duty on machinery and materials for five years, and relaxed the legal requirements of recapitalization. These were consistent with earlier measures of the Ministry which lowered the automobile commodity tax and renewed the direct production subsidies of twenty years earlier.

The Law's restrictions on foreign producers were severe. Annual production ceilings were imposed. Tariff rates on imported parts were raised. In 1937, a provisional law eliminated the import of strategic commodities. Japan Ford and Japan General Motors were soon closed down.

**Japanese Producers Emerge.**—Japan's currently dominant producers, Toyota and Nissan, began producing during this prewar period. Both entered under the available fiscal incentives of the government which were limited at the time. Neither was established at government initiative. The national government's industrial role is usually to protect and encourage the development of domestic firms, but not to actually start them. The origins of the auto industry bear out this pattern.

Nissan was organized in 1933 under the name Jidosha Seizo Co. and was an automobile producer from the start. Toyota began producing automobiles in the middle 1930's as a diversification venture of Toyoda, a leading manufacturer of textile weaving looms. By 1937, these two companies along with Isuzu dominated automotive production with an 80% combined share.

Production by Japanese manufacturers was nearly all truck and bus through the prewar period. Roughly half of truck output was for the military. Passenger car output was negligible, reaching a peak of approximately 2,000 units in 1938. Thereafter, auto makers turned increasingly to arms and military vehicle production.

## **Postwar Reconstruction and Protection of the Industry**

**Establishing the Industry's Financial Stability and Economic Priority.**—The years from the war's end to 1958 form the critical period in the history of Japan's automobile industry. The public policy commitments and the private decisions of auto producers made during this pivotal decade first resolved the question of whether the industry should be developed at all, then went on to determine the competitive environment



and technological direction of its development. The achievements of this period, quite apart from the growth and prosperity which followed in the 1960's, are substantial. At war's end, Japanese manufacturers were largely destroyed, producing 7,500 military trucks annually. Passenger car production levels and technology were negligible. By 1958, Japan was producing one-third of a million automobiles and was designing and building her own passenger cars.

Three themes are prominent in the postwar narrative which follows. The first is a policy debate within government over the economic wisdom of developing a domestic automobile industry. The differences between Ministries were serious but never reached a confrontation or crisis stage. A second theme is the initially critical but eventually declining role MITI played in the postwar auto development. The bureaucracy's range of policy interests and levels of involvement were probably less than generally thought outside Japan.

A third theme is the progress of the producers themselves toward design and production autonomy, culminating in 1958 with the first all-Japanese designed and built passenger car.

The immediately postwar condition of the auto industry was understandably weak and confused. The Occupation established production limits on vehicles, rationed those available, and controlled prices. The Ministry of Commerce and Industry, looking ahead to normal economic conditions, recommended redevelopment of the industry using foreign passenger car technology and government financial assistance. Toyota, Nissan and Isuzu—major wartime truck suppliers—responded with an ambitious five-year plan. The Restoration Loan Corporation, established in 1947, agreed to finance new production facilities. The manufacturers sought relaxation of the production limits. Toyota innovated installment purchases of passenger cars. The will to reconstruct was obvious.

The industry faced serious problems however. Most immediate of these was the occupation's deflationary policy, instituted in early 1949, which forced Nissan and Toyota to cut back expansion and lay off thousands of employees. The restoration loan was reduced and severe labor strikes followed. Despite these temporary setbacks, production continued to rise, and in 1949 total four-wheeled vehicle production achieved the 1941 wartime peak of 50,000 units.

Another problem was Japan's inferior passenger car technology. The accumulated production volume of all passenger cars by domestic producers through 1950 was less than 12,000 units. Critical emphasis had always been on trucks, with the result that Japanese passenger cars were uncompetitive. Moreover, domestic production was officially limited. The Occupation had increased the demand for cars, and despite the opposition of MITI and its predecessor ministry, passenger car imports increased sharply during the period.

Powerful voices within government favored liberal imports. When auto

producers petitioned MITI and the Ministry of Transportation to limit imports in 1950, the latter appropriately recognized the interests of passenger car users and supported continued imports. The Transportation Ministry further contended that importing large cars would not damage the market for small Japanese cars. This argument, probably valid today, was dubious in postwar Japan particularly as domestic auto production controls were just being relaxed, and this argument alarmed MITI. Nevertheless, the two Ministries jointly approved continued imports for a limited period.

A more serious problem was opposition within government to development of an automobile industry. The policy debate, which never formalized into confrontation, occurred from 1949 to 1951 and involved chiefly the Ministry of International Trade and Industry (MITI) and the Bank of Japan. MITI, which emerged in 1950 as a reorganization of the Ministry of Commerce and Industry, favored the development of an automobile industry including emphasis on passenger cars. MITI recognized the critical nature of the industry arguing that auto production would advance major machinery and supplier industries, hence permit a broadly-based economic growth. The urgent immediate postwar priorities—steel, coal, electrical power, and chemical fertilizer—were showing progress in their development, and MITI sought to advance other basic, heavy sectors. Autos, therefore, was another of MITI's client industries.

The Bank of Japan, on the other hand, represented the nation's financial priorities. In view of the scarcity of capital and massive reconstruction task, the Bank argued for selective industrial development. Japan should develop in a context of international economic specialization, investing heavily in areas of comparative advantage while committing limited resources in industries where technology and scale requirements penalized domestic producers.

The alternative to a domestic industry, it should be emphasized, was increased automobile imports, not onshore assembly by foreign capital. Importing passenger cars, at least for a limited period, would not foreclose the opportunity of later development by domestic producers while admission of foreign capital surely would. Japanese postwar policy alternatives did not disregard prewar experience.

Opposition by the Bank of Japan to auto development should not be construed as a thorough denial of access to the banking system by domestic manufacturers. During 1949–50 deflation, the Bank rescued Japan's largest automobile producer from impending bankruptcy as it did other large Japanese enterprises. In 1949, Toyota was near collapse from uncollected debts and unsold inventory. Toyota and its commercial bankers met with Bank of Japan officials to consider strategies for financial survival. The Bank of Japan responded by approving large credit extensions from Toyota's major commercial banks, Mitsui and Tokai, under the condition that the production and sales functions be separated into Toyota

Motor Co. and Toyota Sales Co. Financial crisis was thus averted. There was during that period and remains today, an important distinction between the government's fundamental commitment to ensure the continuity of major Japanese corporations—a commitment which was exercised again during the 1965 recession—and the government's deliberate policy of selecting specific economic sectors for rapid-growth development.

The policy debate was not protracted and in 1951 was resolved in favor of developing domestic passenger car production. The scarcity of automobiles in Japan during the period and the expectation of continuing foreign exchange constraints strengthened the argument for a domestic industry. MITI pointed out that the amount of foreign exchange drain from imported passenger cars over a short number of years could itself finance domestic production and marketing facilities and hence provide self-sufficiency. The matter was finally settled by the Korean War. The automotive needs of the United Nations forces created a timely opportunity for Japanese producers. The Bank of Japan, viewing the procurement demand as legitimate and badly-needed export business, communicated its approval for financing auto production to Japanese commercial banks.

This truck procurement financing helped to stabilize the domestic producers. Total vehicle output reached 100,000 units in 1952, only 5,000 of which were passenger cars. The industry's financial position, however, now permitted them to approach passenger car production seriously.

**MITI's Development Assistance and Protection.**—By 1952, MITI was in position to move toward an industry development policy. The preceding two years had brought a moderate affirmation of the industry's future, an end to postwar auto production and price controls, and reasonable financial stability to the manufacturers. In 1951, Prince entered as the fourth domestic manufacturer. The opportunity for a development effort in passenger cars appeared to be favorable for the first time.

The automobile manufacturers and MITI conferred informally from time to time, and late in 1951, the two groups prepared an agenda for development. The agenda outlined three major areas of public policy interest and defined MITI's immediate role in the development effort. The three were:

- protection from foreign producers' onshore investment and imported vehicles;
- admission of foreign technology for domestic manufacturers' use under favorable terms;
- financial assistance from government.

Within eighteen months, policy was made and implemented in these areas.

**Protection.**—The structure of protection measures which followed was comprehensive and imposing. Regarding the exclusion of foreign capital investment, MITI announced in June 1952, the "Basic Policy for the



Introduction of Foreign Investment into Japan's Passenger Car Industry". This document supplemented Japan's fundamental policy governing foreign capital, the 1951 Foreign Investment Law, which requires government authorization of all investment by foreign capital. The intention was clearly to exclude foreign investment for production in important sectors in order to permit domestic producers' development. The automobile industry eminently qualified in the Japanese view. The 1952 administrative Basic Policy expanded with respect to autos: in the event of foreign investment authorization, no repatriation of earnings or capital will be guaranteed from investments in marketing facilities. Guarantee of repatriation for investment in production facilities will obtain only if it "contributes to the development of domestic industry".

MITI's intention in this policy was to further discourage import marketing investments in Japan while leaving the door open for selected joint ventures, to be approved on a case-by-case basis, of foreign producers with superior auto parts technology. Admission of large American and European auto assemblers was out of the question, however.

Protection from imported products was accomplished with three instruments—quota, tariff, and commodity tax. Foreign exchange quotas for automobile imports had been in effect since the war's end in order to conserve Japan's dollar holdings. From the early 1950's, quotas were employed chiefly to protect domestic manufacturers' new passenger car businesses. Annual passenger car quotas, negotiated with producers but finally determined within MITI, rose from \$613,000 to a total of \$28 million in the 10 years prior to the lifting of quantitative restrictions in 1965. Trucks, buses, and small motorcycles were liberalized in 1961. By 1963, foreign exchange allocation for motor vehicle imports rose to \$23 million, and totalled \$28 million for 1965.

Most auto parts were freed a year later. Automobile engines however remained under foreign exchange quota through the 1960's. The Japanese deterred onshore assembly of foreign cars rather comprehensively.

Japanese tariff rates on autos have been high and, in addition, geared in their relative structure to domestic producers' interests. Small passenger cars, the critical development area within the industry, retained relatively and absolutely high tariff rates. Trucks, where Japanese producers have been strongest, had the lowest rates generally.

A third instrument of import protection is the commodity tax rate structure. Commodity tax is levied on all passenger vehicles—domestic and foreign—sold in Japan in order to finance road construction. Large cars pay higher percentage rates. While the structure's basic purpose is to influence the size of domestically produced cars, the tax does function to protect domestic manufactures. The higher rates on large cars penalize American imports. The rate structure is geared to wheel base and piston displacement, hence a Chevrolet Camaro pays a higher rate than a Mercedes Benz. Most U.S. models fall into the largest of three size



categories. In addition, the imports' tax base is landed value while the domestic tax base is ex-factory price.

**Foreign Technology.**—The imposition of severe import quotas and the abolition of domestic production controls during the early 1950's created for Japanese producers a market opportunity which they were not technologically prepared to exploit. Domestic producers turned out only 4,317 passenger cars in 1951, and these were regarded as uncompetitive in price and quality with western imports. Parts technologies and production methods were undeveloped. Most manufacturers agreed with MITI on the necessity of importing foreign technology.

In October 1952, MITI issued the "Basic Policy for the Technological Licensing and Assembly Agreements in the Passenger Car Industry". Existing foreign exchange control legislation gave the bureaucracy administrative control over individual technical and licensing agreements of Japanese and foreign firms. MITI's new Basic Policy sought to make technology agreements more attractive to the licensor by guaranteeing the remittance of royalties from Japan. The document further stipulated that if the license covers complete knock-down assembly of foreign passenger cars in Japan, continued guarantee of remittance requires that 90% of the licensed parts must be produced in Japan within 5 years.

MITI had struck a compromise. Obtaining operational foreign technology required substantial imports of foreign value added in the form of parts and subassemblies. However by making remittance conditional on the transfer of parts manufacture to Japan, MITI served notice that the knockdown import would be permitted only for a limited period of time. Domestic manufacturers were thus given additional incentive to develop manufacturing capability for their licensor's parts. In the process MITI relinquished no loss of import control: quotas and tariffs on parts were retained.

Within twelve months of the policy's issuance, six domestic manufacturers had negotiated agreements for knock-down assembly of foreign cars in Japan under license. Of the six, Nissan was the only one then producing passenger cars. Hino, Mitsubishi, and Isuzu were traditional truck manufacturers entering the car business in 1953 by virtue of foreign license. Applications of these four were approved by MITI. Two others—by Fuji Auto (no relation to Fuji Heavy Industries now producing autos) and Nichiei—were rejected. MITI apparently considered these two firms too financially weak to survive. It is also likely that MITI at that early date foresaw the problems of too many producers and "excessive competition" in a highly capital-intensive industry. In any event, MITI did eliminate two competitors at the technology import stage.

The parties to the agreements were:

1952	Nissan	Austin (U.K.)
1953	Isuzu	Rootes (U.K.)
1953	Hino	Renault (France)
1953	Mitsubishi	Willys (U.S.A.)

It should be pointed out that the technology imports were initiated by the manufacturers not MITI. The bureaucracy and the producers had previously discussed the desirability of licensing production; in fact, the negotiations with licensors had begun long before the Basic Policy's appearance. But MITI evidently played no direct role in the agreements themselves other than to approve them.

The role of foreign technology in Japan's auto development should not be overestimated. Toyota and Prince, two of the three major passenger car producers of the period, used domestic know-how exclusively. The four licensees of foreign technology rapidly improved their own, with the result that assembly of European cars in Japan was not long a factor. The Isuzu-Rootes agreement was the longest, running through 1964. It produced less than \$1 million in royalties over 12 years.

The absence of United States auto producers in post-war Japan until recently stands out. The lack of technology agreements is understandable in terms of either Japan's reluctance to produce under license cars of over-sized U.S. dimensions or the Big Three's reluctance to trade technology for anything less than equity. It is more curious however, that U.S. producers, despite foreign investment barriers, did not negotiate an equity position of some form in Japan before 1971. It is not only alleged but probable that at least one U.S. producer was informally invited to joint venture with domestic capital in auto production during the 1950's. Japanese producers were weak technologically and competitively. Annual car production in 1955 was a mere 20,000 units. It is reasonable to believe that the Japanese government might have permitted, even welcomed, selected U.S. capital participation under clearly defined constraints regarding share of equity, earnings repatriation, and management prerogative. The basis of Japanese objection to foreign capital is not that it is foreign, but that it is uncontrollable. It would be interesting to ascertain whose entry conditions were the least flexible—the Japanese government's or the American auto producers'.

**Financial Assistance.**—It is characteristic of Japanese industrial development efforts that direct financial assistance from government is relatively small in amount and diverse in form. This is true of the automobile industry.

Under MITI's recommendation, the Japan Development Bank extended reconstruction loans to auto producers from 1951 to 1955. The Bank had just been organized in April 1951 to, as its charter reads, "supply long term funds to Japanese industry for the promotion of eco-

conomic reconstruction and development, supplementing and encouraging the credit operations of private financial institutions." The Bank's loans financed roughly 9% of total investment in passenger car production facilities during the five-year period. Autos joined iron and steel, electric power generation, and coal mining—three of Japan's four officially-designated critical postwar reconstruction priorities—as the Bank's earliest borrowers. This clearly had a favorable impact on the auto producers' access to the private commercial banking system.

Special accelerated depreciation rates were extended to auto producers, among others, by fiscal legislation prepared by MITI in 1951. Rates of up to 50% depreciation in the initial year were permitted on reconstruction machinery in critical industries. In addition, this machinery if imported was exempted from tariff duty. Finally, direct subsidies amounting to roughly \$1 million were awarded to the Automobile Technology Association, representing manufacturers, during the 1950's.

Auto reconstruction, in summary, was eased considerably by a number of government-related financial measures at a time when capital resources were limited. Low-cost Japan Development Bank borrowings, tax and tariff exemptions, and subsidies all helped. Korean War procurement, however, was perhaps the critical stimulant.

**Producers Achieve Design Autonomy.**—The middle and later portions of the 1950's were years of major technical progress for the industry. In 1952–53, four of the industry's six major firms had begun domestic assembly of passenger cars from imported parts of foreign design. The two others had remained technically independent. By 1958, nearly every passenger car assembled in Japan was designed and produced domestically. Japan had achieved nearly complete autonomy in production of parts and passenger car design within five years. This progress, it should be noted, was facilitated by the stable number of passenger car producers. Toyota, Nissan, Isuzu, Hino and Mitsubishi (with Jeep) remained the only large scale producers.

The implications of this autonomy were important for Japan. The foreign exchange drain and the susceptibility to perverse economic cycles through trade imbalance, as functions of knock-down auto imports, were reduced. Domestic production of auto parts advanced the development of the steel, machinery, and rubber industries which during the 1960's would experience, along with autos, unparalleled growth and achieve comparable international competitiveness. Design autonomy opened up the opportunity for automobile export in the next decade, during which time Japan's export would of necessity shift from high labor, low technology goods toward low labor, high technology products. Finally, autonomy vindicated MITI's protection policy and established a significant strategy precedent.

In evaluating MITI's role through the late 1950's, one must say that its contributions were essential. The Ministry identified automobiles as an industry critical to Japan's economic future and defended the industry's



position against the opposing strategy of the Bank of Japan and the indifference of the Ministry of Transportation and other users' representatives. In its role of postwar economic strategist, MITI came to dominate policy making given the urgency of the resource allocation problem and the docility of the postwar Diet. It was from this strong and central position that MITI actively supported the industry's development.

MITI, however, did not dominate the producers nor monopolize the initiative for development. Its elaborate policy of protection was of course essential. The Ministry's admission into Japan of unassembled foreign cars in order to build domestic technology was necessary and highly effective. Its financial assistance to producers, on the other hand, was highly useful but not critical. MITI played little or no role in the investment policies or technological development activities of the producers. As the decade closed, MITI's role among auto producers waned. By 1958, the highly-protected industry was profitably producing one-third of a million vehicles, including 50,000 passenger cars, and was reaching design autonomy. Some measure of autonomy from MITI was gained in the process.

## **Government Role In Automobile Parts Industry**

The present structure of the automobile producing sector in the Japanese economy resembles a pyramid, with product flowing from bottom to top. At the top are the vehicle producers—Toyota, Nissan, etc.—which essentially manufacture engines, and design and assemble vehicles. Each assembler is supplied by an affiliated group of primary parts manufacturers. These firms, roughly 350 in number usually sell exclusively to one assembler. (Several large independent parts manufacturers have now emerged however.) The bottom layer is small parts subcontractors who supply, both exclusively and non-exclusively, the primary parts firms. There are several thousand small subcontractors, many of whom are affiliated through ownership, technology agreements or simply captive arrangements with primary parts manufacturers or the assemblers themselves.

This unique structure, which originated before the war when small suppliers manufactured their own-designed parts for the emerging domestic assemblers, took definite shape during the middle 1950's when Japanese assemblers under license began to shift from imported parts to domestic sources. The absence of domestic parts technology and the exclusivity of the license arrangements between European and Japanese assemblers forced the auto sector into a series of affiliated and exclusive vertically ordered groups, each shaped like a pyramid. Technology and credit flowed down and product flowed up. The system was typically Japanese but apparently not preconceived.



The system did have advantages. The assembler had a stable yet elastic source of supply as demand fluctuations were felt by the marginal subcontractor. Labor costs at the subcontract level were usually lower than in the large firm. However, the shortcomings of the system became an increasing problem as the parts supply function shifted from Europe to Japan and as design improvements required more advanced parts technologies.

The problems stemmed from the large number and small size of the primary parts manufacturers and subcontractors. In the middle 1950's the system, in fact, was shaped more like a middle-heavy pyramid. The organization of production among affiliated parts producers was traditionally determined and uneconomical. Production scale was low which precluded economies of scale and modern production technologies. The firms were financially weak. Both MITI and the major auto producers recognized that the production efficiency and technological progress of the industry were jeopardized.

MITI had taken a serious policy interest in the parts industry since the early 1950's. In 1952 the production of certain staple auto parts needed urgent attention. MITI responded by diverting budget originally allocated to auto assemblers' development to immediate subsidies for specific parts producers. Over the next few years, MITI recommended that Japan Development Bank long term credit be extended to large, viable parts suppliers of the four major auto producers. At least ten parts manufacturers participated in the borrowings.

In 1956, MITI used a major piece of new legislation to implement a more thorough financial assistance and rationalization program in the parts industry. The Diet passed in that year the Extraordinary Measures Law for the Rehabilitation of the Machinery Industry. The Law, which MITI had prepared, permitted the Ministry to channel government lending to particular machinery industries of its choosing. Specific rationalization and modernization goals were to be determined in advance. This program was typical of many in the 1950's as Japan sought to allocate limited capital over a number of obsolescing, fragmented industries.

The fundamental mechanism of the assistance was an ad hoc industry committee, a joint creation of the industry's trade association (or associations), MITI, and other relevant government agencies. In 1956, the Auto Parts Committee was formed with a membership that included MITI Heavy Industry Bureau officials, presidents of various part manufacturers' trade associations, and senior officers of the Automobile Industry Association representing the auto makers. The trade association is the formal link between government and business in such matters as producer rationalization programs, capacity allocations, and export cartels. Its responsibilities are major, particularly in programs such as auto parts, and often offend American standards of antitrust.

The program initiative lay with this Committee, which was responsible

for developing operational programs acceptable to all its constituents and formally proposing them to MITI. The auto parts program, planned in five-year intervals and formally lasting through 1971, was readily accepted by MITI. Its contents, while important, were neither controversial nor critical. The Ministry's role varies by industry and its stage of development: its ubiquitous activity in the computer peripheral equipment production cartel sharply differed from its detached supervisory role in the textile sector modernization programs of the 1960's.

The auto parts reform during 1956 to 1966 aimed at the modernization of facilities and concentration of production among fewer producers in 45 of 95 parts categories. Mergers although encouraged were not specifically programmed. Specific parts manufacturers were approved for borrowing by the Committee under criteria heavily influenced by MITI. The criteria are revealing: large firms were, *ceteris paribus*, favored over small firms, specialized over diversified, and exporting over non-exporting. MITI wanted to develop, given the constraints of the affiliated system, a small group of large, specialized parts firms capable of competing with American suppliers. (At one time, MITI reportedly suggested that the number of primary parts manufacturers could be reduced to 45. There presently remain over 300.)

The 10-year program from 1956-66 is generally regarded as reasonably successful. Nearly \$50 million in low-interest, long-term loans were extended by the Japan Development Bank and the Small Business Finance Corporation over the period. The forecast volume of the basic annual lending plans were usually realized. Market share concentration and price reductions achieved in many parts sectors by 1966 are impressive. The combined market share of the three leading producers and the total number of domestic manufacturers for eight of the relatively concentrated parts markets in 1966 are shown below.

	Percent	No. of Manufacturers
Piston Rings	100%	3
Spark Plugs	100	3
Oil Filter	95	10
Shock Absorbers	92	8
Cylinder Liners	90	9
Nozzles	74	55
Radiators	73	6
Carburetors	62	6

Typically, one of the three leading producers will be a Toyota affiliate, one a Nissan affiliate, and the other an independent producer.

Price reductions in parts were dramatic throughout the period and critically important to Japan's subsequent export penetration of the United States market. Percentage price reductions from 1960 to 1965 in

eight auto part categories indicate an average percentage decline of roughly 30%.

Shock Absorbers	36%
Ball Bearings	35
Gaskets and Packings	34
Electrical Equipment	30
Pistons	29
Window Frames	28
Radiators	25
Piston Rings	24

Japanese annual total automobile production over the period increased by two and one-half times. Exports increased by five times.

The remaining five years (1966–71) of the auto parts rationalization program contrast with the decade (1956–66) just reviewed in both purpose and degree of success. MITI's ambitions for further consolidation of the parts industry exceeded the willingness and ability of the manufacturers to bring it about. As a result, the substantial results of the government's rationalization program to date were accomplished in its first ten years, 1956–1966.

During the 1960's, MITI's automobile sector concerns turned increasingly toward industry consolidation and the threat of capital liberalization. These themes in fact will dominate the remainder of this review. Japan's entry in OECD and her shift to a convertible currency status within IMF in 1964 introduced new considerations and created new urgencies for MITI's industrial development policy. Liberalization of foreign capital investment and foreign exchange transactions became issues of immediate concern. The implication for auto sector development policy was clear: domestic producers must be strengthened at an accelerated rate.

Despite the gains in concentration and efficiency before 1966, the primary part manufacturers at that time remained largely one- or two-product companies. The borrowing criteria had in fact rewarded specialization. In addition, Japanese parts manufacturers were small in size compared to their American counterparts. Evidently, MITI thought that larger, horizontally integrated parts manufacturers would improve Japan's competitive position vis-a-vis imports and would reduce the willingness and need of domestic firms to seek foreign technology through joint equity ventures. Part ventures were permitted on a case-by-case approval basis but not encouraged.

Consequently, the rationalization program which MITI approved for the third five-year period (1966–71) emphasized horizontal combination, even across affiliated group lines. The government would financially assist either mergers or jointly-established research efforts into auto parts and sub-assemblies by parts producers. MITI hoped to create large "unit system" or sub-assembly producers. It is not publically clear whether the independent views of the auto producers and primary parts manufacturers who sat on the Auto Parts Committee and the newly appointed advisory

Automotive Parts Policy Research Committee were in agreement with MITI's new policy during the plans formulation or whether their views were actively considered.

The results, however, reflect a lack of interest by parts manufacturers. Despite the annual production growth rates of 25 to 40% during this period which made low-cost, long-term lending sources extremely attractive to these capital-constrained single product companies, borrowings were not heavy and program budgets were not fully utilized. MITI originally intended to tie the loans to "unit system" ventures, however a broader range of rationalization projects were later accepted.

The horizontal consolidation phase of the program was not really successful. A number of subcontractors merged into primary parts manufacturers. Two large Nissan affiliates in the lighting equipment area merged. A three-way clutch venture including Toyota and Nissan affiliates has been considered. However, the real targets of the program—primary parts manufacturers—have not been significantly affected.

The reasons behind the inactivity vary. The auto producers themselves were reorganizing their affiliates and allocating production more efficiently during this period. Nissan has perhaps been most active in this area. To some degree, a tension exists between, on the one hand, the traditional financial and managerial relations of assembler and part supplier and, on the other hand, the conditional terms of consolidation assistance. The vertical nature of the affiliate system did not easily accommodate the horizontal, total market orientation of the government's program. The program was not a success. The mild difficulty MITI encountered in its parts consolidation is, however, overshadowed by its profound frustration in its efforts to consolidate the automobile producers.

## **Industry Consolidation Efforts of the 1960's**

**MITI's Concern with Structure.**—Japan's auto industry in the 1960's is notable for both what it accomplished and what it resisted. Its accomplishment is now well-known. In ten years, the industry rose from a fledgling group of producers of less than 100,000 passenger cars annually to the second largest auto producer in the world. Total vehicle output increased by a multiple of ten, passenger car output by twenty, and passenger car exports by one hundred. The Japanese emerged from the technological dependence on western producers by designing exemplary assembly plants and competitive automobiles. They now potentially threaten U.S. dominance.

It was during this same period that MITI attempted, and the manufacturers resisted, the consolidation of the industry by bureaucratic inducement into fewer and larger "groups" of auto producers. Various consolidation plans were introduced by MITI, but consensus among manufacturers, the elements of government, and the business community was never



achieved. A number of business combinations in the form of mergers and cooperative production arrangements did occur after 1965, however, these were largely self-motivated and usually consummated by the producers without direct Ministry influence. These consolidations were clearly not responses to MITI's several "grouping" plans enunciated during the decade.

Understanding MITI's ambitions requires an appreciation of the circumstances of the auto industry entering the period. From the introduction of foreign technology in 1952 until 1960, the number of conventional passenger car producers had remained stable. Fuji Heavy Industries had innovated the mini-car, and two new firms—Toyo Kogyo and Suzuki—had entered trucks. But passenger car growth had accrued to existing producers. By the end of 1962, however, three more firms—Mitsubishi, Fuji and Toyo—had entered conventional passenger cars. Four producers had newly entered the truck business. The total number of vehicle producers increased by 50% within two years. Most importantly, the combined auto market share of Toyota and Nissan had dropped from three quarters to less than half in two years.

Rapid market entry was, of course, to be expected during this take off of passenger car demand. Annual passenger car output more than tripled between 1959 and 1961. This explosive growth not only invited but required new entrants. During 1961, for example, Toyota and Nissan together lost eleven percentage points of market share but grew in combined sales revenue by 38%.

MITI viewed this increase in number of producers with anxiety however. From an early date, the Ministry had understood the economics of modern auto production and had worked to limit the number of producers. In 1953, two of six applications for foreign technology import were rejected. Two years later MITI suggested that all auto producers develop a prototype People's Car, then permit MITI to select one design and subsidize its production by the single privileged manufacturer. The hope was to develop a single popular car which could dominate the market. The auto manufacturers quietly but strongly objected to the single-company subsidy concept, and the plan never reached the Diet. This was perhaps the manufacturers' first major resistance to MITI policy.

Underlying MITI's concern with industry structure was not only domestic production efficiency but international competitiveness as well. Liberalization of passenger car import quotas was not imminent but clearly inevitable. It was imperative that Japanese cars become competitive in Japanese markets by the date of liberalization.

Export opportunity was also at stake. Japan was already exporting 50,000 vehicles in 1961, including over 11,500 passenger cars. MITI apparently appreciated the export barriers presented by the chronic non-standardization of parts (which was already a serious problem among sub-contractors in the 1950's), the fragmentation of capital-intensive pro-

duction among several manufacturers, and the inability of small producers to undertake marketing risks abroad. Resisting imports was also important for developing the export opportunity. Japanese producers had to preempt all domestic market growth in order to gain sufficient production scale and experience to compete in American, and hopefully European markets.

Consequently, Japan's opportunity to develop an internationally competitive auto business was time-limited. Any combination of slow domestic growth or excessive production fragmentation or premature import liberalization during the industry's take-off stage could delay and hence prevent Japan's reaching competitive parity before Japan's market was opened. MITI, it appears, viewed this possibility with great concern.

**A Series of Efforts.**—At a 1961 meeting of the Industry Structure Advisory Council, MITI revealed a proposal to organize passenger car producers into groups based on the car's basic design type. Three groups—regular passenger cars, minicars, and specialty cars including sportscars—were defined. A firm's entire production would be limited to one group. Minimum volumes would have to be met within three years. The objective was to force a concentration of product line and eventually eliminate small producers.

The producers' response was understandably hostile. Toyota and Nissan reportedly did not voice strong opposition. These firms stood relatively to benefit of course. Competition in conventional passenger cars, which five new producers entered between 1960 and 1963, would have been reduced. Neither Nissan nor Toyota had entered mini cars on the other hand. The other producers objected. By 1962, Toyo Kogyo, Mitsubishi, Daihatsu, and Fuji all were producing both conventional and mini cars. The proposal was aimed at these firms, who by 1962 had roughly 30% of the total auto market. After a series of unsuccessful discussions, MITI dropped its proposal.

MITI, it should be noted, found it neither possible nor appropriate to force consolidation upon reluctant auto manufacturers. The Ministry does enjoy a broad range of legitimate policy initiative and commands a large number of implementation techniques. It can, for example, rather directly control inflows of imported product and foreign capital. It can somewhat less autonomously allocate direct financial assistance and indirect fiscal incentives. It could have sought legislative charter permitting it to direct production cartels and distribute export market shares. Finally, it could have and in fact did seek a legislative charter to, with the cooperation of its client producers, organize and finance special industry programs in development and production rationalization. The strength and attitude of the client manufacturers are important in determining what is done. These MITI functions are sanctioned by a varying mix of formal authority and informal consensus between MITI and its client manufacturers. Neither

that authority nor consensus, however, permitted MITI to order formal combinations of the auto producers.

In 1962, MITI was concerned with structure in several major industries including autos, petrochemicals, and tires. It sought a comprehensive legislative charter to undertake, in cooperation with industry, major programs for producer specialization, establishing appropriate investment levels, and promoting mergers and groupings. Toward this end, the Development Law for Specific Industries was drafted by MITI. The law conferred major conditional financial advantages on the automobile industry among others. Participation in any program was the choice of industry, while the programs themselves would be jointly conceived by the manufacturers, the commercial banks, and MITI. The proposal was ambitious.

The wide scope of the proposed Law attracted attention from many elements of government. The ruling Liberal Democratic Party's leadership strongly favored enactment. Prime Minister Ikeda observed that "the Japanese automobile manufacturers will not become competitive with General Motors and Ford under the current situation." Japan's ability to compete in post-liberalized industrial equipment markets was a major political preoccupation of the time. Ikeda's remark on autos reflects a broader concern.

The voices in opposition were strong however. The Socialist Party leadership strongly opposed concentration of economic power and was preparing, nearly simultaneously, a bill to regulate excess oligopoly. Socialists favored a firm interpretation of Japan's Anti-Monopoly Law. The Fair Trade Commission also opposed the Development Law's enactment. The draft law contained provisional exemption of the auto industry from the Anti-Monopoly Law, which the FTC administers. It was not well-disposed toward the exemption or the draft law.

Finally, the auto producers themselves generally opposed the legislation. Some complained that the Law would extend the industry's intimacy with government beyond desirable limits. Auto producers did not want to jeopardize their autonomy. More importantly, there was yet no financial necessity for even the secondary (all except Toyota and Nissan) producers to limit their energy or seek consolidation among each other. While the industry was exceptionally competitive, it was uniformly profitable for major producers. Even non-dominant manufacturers earned sufficient return on their investment during the first half of the 1960's to finance the required growth. Five non-dominant producers—Toyo Kogyo, Mitsubishi, Fuji, Daihatsu, and Honda—between 1963 and 1965 gained or maintained market share. This was in fact accomplished with relatively conservative financial policies. Only one producer, Mitsubishi Heavy Industries, had in 1965 a debt-equity ratio in excess of three. There was, then, no financial urgency before 1965.

The draft law failed for reasons not particular to the auto industry. The government, however, did not give up its effort to make merger financially



attractive in the event the occasion arose. MITI and the Ministry of Finance qualified auto producers for the existing Government Investment and Loan Program. The participating Japan Development Bank would help to finance any bona fide formal merger or cooperative production affiliation. In addition, the two Ministries devised and secured approval of a special tax-deductible allowance which rewarded mergers. Tax liability was substantially reduced for a limited period in proportion to the increase in a firm's capital through merger.

MITI's techniques of persuasion were not limited to the financial area. The Ministry was discriminating in its approval of foreign technology introduction by domestic producers. Radiator technology provides an illustration. Toyo Kogyo, the third ranking auto producer and strongly opposed to consolidation, did not receive approval to introduce radiator technology from Renault in 1968. Subsequently, MITI received application from Nissan for import of essentially the same technology. Only then, simultaneous with Nissan's, was Toyo's application approved.

By the middle 1960's, MITI's concern with structure was acute. The Ministry's prestige as well as the industry's economics was vulnerable. Two facts were very clear. On the other hand, the fragmentation of market share was pronounced by 1965: eight firms individually held five percent or more of total vehicle production. Only Toyota and Nissan were internationally viable.

On the other hand, the prospect of continued protection from foreign competition was limited. In October of 1965, quantitative restrictions on passenger car imports were removed. During the preceding year, Japan entered OECD with a commitment to undertake liberalization of foreign capital investment. Auto liberalization was inevitable. To defuse that eventual liberalization became MITI's dominant objective for the remainder of the 1960's. Quite apart from consolidations' strengthening the domestic industry competitively against American capital, merger and affiliation of Japanese producers were the only effective ways to deny foreign manufacturers domestic partners. A marginal, independent domestic auto producer would be the naturally desirable partner of entering foreign capital.

**Nissan-Prince.**—The first major consolidation in the industry occurred in 1966 with the merger of Nissan and Prince. This combination is notable because it was the first and remains the only formal merger of major auto producers. Moreover the essential stimulus to merger was financial, not bureaucratic. MITI, however, took advantage of the opportunity when it arose and acted strongly to help consummate the merger.

The initiative for this merger was clearly on the Prince side. In the early 1960's Prince had made the mistake of challenging Toyota and Nissan in the area of their strength, the 1500–2000 cc passenger car segment. By 1965, the firm was beset with financial losses, a marginal share of market (seventh in the industry), and excess production capacity.



The anxiety of Prince's creditors rose to a point where merger became a very real possibility. From that point forward, the course of events, which is summarized below, reveals the interaction of bankers, the top management of several auto producers, and MITI officials.

Sumitomo Bank was the most heavily committed among Japanese lenders to Prince. Mr. Hotta, the Bank's president, and Mr. Ishibashi, Chairman of both Prince and Bridgestone Tire Companies, considered reorganization and recapitalization late in 1964, but found this alternative unrealistic. Mr. Ishibashi agreed that Mr. Hotta should seek a merger candidate. It should be noted that the initiative for a major change of the company's course came from the creditor, not the shareholders. In Japan, the major banker is typically the most powerful party in fundamental matters of change of management and corporate survival. In a real sense, the future of Prince lay with the Sumitomo Bank at this time.

MITI's senior officials had been in contact with the top management of Prince during this period. Mr. Sakurauchi, the Minister of International Trade and Industry, and Vice Minister Sabashi had privately urged Chairman Ishibashi to seek merger with another auto producer. This counseling, which was originally arranged through Minister Sakurauchi's father who was a close friend of Mr. Ishibashi, reportedly emphasized the advantages of merging with one of Prince's direct and rapidly growing competitors—Nissan or Toyota—to permit immediate utilization of Prince's unfilled new plant and more importantly to begin building the industry around these two dominant producers. MITI's administrative guidance was well-received.

Sumitomo and MITI were both seeking merger candidates, with MITI proposing either Toyota or Nissan. Both the Bank and the Ministry experienced initial failures in their search. Mr. Hotta approached Toyo Kogyo, the third leading producer, to ascertain its interest. Toyo showed none. Minister Sakurauchi had meanwhile approached Toyota's president, Mr. Ishida, but the nation's largest auto producer did not respond. Mr. Sakurauchi then immediately met with Nissan's president, Mr. Kawamata, appealing to his personal desire to become an industry leader. An agreement to enter merger negotiations was reached within three days.

The merger was consummated in May 1966. The negotiations principally involved the two companies and their banks. The Industrial Bank of Japan (IBJ) was Nissan's major creditor. As a formerly government-supported bank, IBJ as a private creditor has retained an unusually close, even privileged relationship with the Bank of Japan and the government. Nissan's president, Mr. Kawamata, was an official of IBJ before coming to Nissan. The Bank's assistance in direct negotiations and informal communications with MITI was important. IBJ has generally supported MITI's efforts to consolidate secondary producers around Nissan. The Sumitomo Bank represented Prince's financial interests. In addition, the chief executive of the Japan Development Bank entered the discussions and promised financial assistance to the merger.

The merger served many interests well. MITI's strategic aim—the merger of a secondary producer into one of the two dominants—had been accomplished. Nissan's major interests were served as well. The company which had struggled with inadequate passenger car capacity acquired Prince's modern and underutilized plant. Prince's technical staff was highly regarded, and its dealer network gave Nissan improved distribution coverage. Prince, of course, was financially extricated, and the bankruptcy of a major firm in Japan was avoided.

A Japan Development Bank credit of roughly \$15 million was extended to the merged company. This was the Bank's first lending to the auto industry under the new criteria requiring consolidation since MITI's policy announcement to that effect three years before. Only one other government-sponsored loan to the industry was made subsequently, this in connection with Hino's affiliation with Toyota later in 1966.

Two obstacles characteristic to Japanese mergers had to be overcome. One involved labor unions. Since Japanese unions are organized within and oriented to the company, horizontal merger introduces a conflict over precedence somewhat parallel to the dualism of top management which results. The Nissan-Prince problem was compounded in that each company union was affiliated with a different national confederation of unions. The problem was resolved by absorbing the Prince labor organization into Nissan's although a split confederation loyalty remained.

A second difficulty in Japanese mergers is the defining of an acceptable relationship among the firms' several banks. The problem, again one of dualism, is a serious one in a system where a single bank finances a significant portion of a firm's assets and where many of the prerogatives of residual shareholders in the United States are exercised by the banks' executives. In the Nissan-Prince case, all of the major creditors of the constituent banks are now creditors of Nissan. Of course a successful firm eases the problem of bank integration: bankers are somewhat less insistent on escorting success than in avoiding failure.

The Nissan-Prince merger apparently stimulated other manufacturers to pursue consolidation. Within two years of the merger, six separate auto producer affiliation arrangements were negotiated of which only two were consummated. These six were not formal merger proposals but rather "groupings", or limited bilateral arrangements by which minority shares were exchanged, overlapping production was rationalized, parts were standardized and dealerships were shared. The six negotiations involved:

Year	Companies	Outcomes
1966	Toyota-Hino	success
1967	Fuji-Isuzu	failure
1967	Toyota-Daihatsu	success
1967	Mitsubishi-Fuji-Isuzu	failure
1968	Mitsubishi-Isuzu	failure
1966	Nissan-Isuzu	failure

A thorough treatment of these negotiations is beyond our purpose here. It should be noted, however, that the only two successes belong to Toyota. In both cases, the product lines were complementary: Hino's trucks and Daihatsu's minicars with Toyota's conventional passenger cars. Both affiliations were arranged by Mitsui Bank, which was the primary creditor for all three firms. MITI did not intervene in the discussions at the request of the manufacturers. Both Hino and Daihatsu were profitable with good market positions in their primary products, but both required additional capital. Toyota currently owns roughly 6% of each.

Among the four unsuccessful negotiations, Isuzu was involved in every one. In each case except Nissan-Isuzu both negotiating firms were marginal producers. Generally the major product lines competed. Despite the enthusiasm of their banks for affiliation and their deteriorating market position as marginal producers, the fundamental obstacles of product line competition and management succession overcame the negotiations.

MITI figured prominently in only one, Nissan and Isuzu. MITI's chief of Heavy Industry Bureau, Mr. Kumagawa, and two ex-MITI officials who then were directors of Nissan and Isuzu respectively brought the two firms to serious discussions. MITI hoped to tie Isuzu's strong truck business to a viable auto firm to eliminate the firm as a target for the impending foreign capital invasion. Isuzu had steadily lost auto market share for five years and was approaching serious financial difficulty. A formal tie-up was achieved, but it was only marginally operational. Isuzu presently manufactures Nissan vehicles by subcontract. However, Isuzu's truck business competes with Nissan's truck affiliate, Nissan Diesel, and cooperation has never been fully achieved. The two will undoubtedly disengage as General Motors purchases Isuzu's minority stock.

MITI's effort to bring Nissan and Isuzu together was one of several attempts in the late 1960's to consolidate the industry around Toyota and Nissan. As capital liberalization drew near and attempted affiliations between marginal producers failed, MITI saw the final opportunity for consolidation in grouping secondary producers around the two dominant ones. Toyota had already affiliated with Daihatsu and Hino; Nissan had merged with Prince. Honda and Suzuki were independent mini-car producers. That left three major secondary producers—Toyo Kogyo, Isuzu and Mitsubishi.

After the Nissan and Isuzu overtures collapsed, MITI introduced Nissan into the joint venture discussion on automatic transmission production then going on between Toyo Kogyo and Ford. MITI seized this opportunity to exercise its leverage, i.e., veto powers over joint ventures requiring case-by-case approval, by insisting on Nissan as a third partner. MITI hoped to bring together Nissan and Toyo, traditionally a very independent company. The joint venture of three parties materialized, but a Nissan-Toyo relationship did not.

At the end of the decade, MITI was confronted with its failure to

consolidate the industry. Its three-group and two-group concepts had failed to materialize. Its legislative programs for consolidation had failed passage. Its financial incentives for affiliation had drawn limited response. While three secondary producers—Prince, Hino, and Daihatsu—had been merged or grouped into the two dominant producers, three conventional passenger car and truck producers—Isuzu, Mitsubishi, and Toyo Kogyo—remained independent and vulnerable.

At the end of 1971 the industry was organized as follows.

<b>Firm</b>	<b>Market Share</b>
Toyota	31.5
Hino	0.8
Daihatsu	5.7
Nissan	25.5
Fuji Heavy Industries (Auto)	4.0
Toyo Kogyo	9.2
Mitsubishi Heavy Industries (Auto)	7.2
Isuzu	3.3
Honda	7.7
Suzuki	5.1
	<hr/> 100.0

One summary observation on the consolidation efforts during the second half of the 1960's seems appropriate. It is that financial necessity rather than bureaucratic inducement was the critical stimulus in the affiliations during this period. Total vehicle production rose from 1965 to 1969 at an annual compound growth rate of 26%. Passenger cars rose at over 30%. The total financial and production capacity commitments necessary to merely maintain auto market share were doubling every three years. The recession of 1965, on the other hand, had severely interrupted the cash flow of auto producers. Hence the industry experienced a period of rapidly escalating requirements immediately following a year of severe operating cash flow strain. The large, dominant firms with superior earnings performance and access to the banks increased their market shares during this period as secondary producers found it difficult to finance comparable growth.

This inability to finance market growth and the failure of the industry to consolidate domestically accelerated the introduction of foreign capital into the industry. Toyo Kogyo, Isuzu, and Mitsubishi's auto division sought affiliation with foreign capital to gain financial as well as marketing, technical, and product strength. Naturally, MITI's failure to consolidate the industry had the effect, not of exposing Japan's secondary producers to the competition of the Big Three, but of forcing them to align with the foreign producers in the Japanese market.



## **Capital Liberalization and the Future of the Industry**

**The Coming of Liberalization.**—In April 1971, foreign capital investment was formally authorized in Japan's automobile industry. As a part of the fourth round of foreign capital liberalization, the government permitted the automatic approval of new ventures of equal Japanese and foreign ownership in the auto production, auto sales, and auto parts fields. Japan's largest single industrial sector had been opened up after years of intense debate within the Japanese economic policy community. The form and substance of this lengthy exercise in policy evolution are discussed in this final section.

The interaction among government and business elements during the period leading up to liberalization has two salient characteristics. One is its broad scale. Auto's position as the nation's largest industry and the simultaneity of the liberalization debate with the surfacing of other major economic and political issues between Japan and the United States attracted widespread and serious interest among Japanese policy makers. The Cabinet, the political parties, the bureaucracy, the auto industry, and leaders of the business community all participated. No other single event in the auto industry's history and no other single foreign capital issue of the post-OECD period has been as critically and widely discussed as auto liberalization from 1967 to 1971.

A second feature is the early unanimity within the policy community and the subsequent divergence of positions as conditions changed. The uniform resistance to liberalization steadily fragmented as the economic and political costs of continued protection appeared to some to grow. At the same time, the benefits of foreign automobile capital began to appear to others. By 1969, some representatives of government, the business community, and the industry itself favored liberalization. This domestic affirmation together with the increasing political persuasion from the United States brought the issue to a head.

It was apparent in 1967 that autos would become a major issue between the United States and Japan as the latter undertook gradually to open domestic industries to foreign capital. On the one hand, Japan's protection of the industry was then a devoted one. There was no serious or powerful opposition to the position of MITI and the industry: the weak structure of Japan's largest industry and potentially largest exporter after shipbuilding justified continued protection. On the other hand, interest in Japan among U.S. auto producers was high. After alleged earlier missed opportunities to enter Japan, they were eager to invest. In addition, Japan's success in auto exports, which was anticipated at this time, would weaken the case for protection and make continued access to U.S. markets a powerful bargaining tool. Success would inevitably undermine protection.

Auto liberalization became an explicit discussion topic around 1966. The OECD member nations confronted Japan in that year, criticizing its

failure to show any progress toward liberalization. Japan had entered OECD under official reservation, retaining its prerogative of selective approval of direct foreign investment. Japan simultaneously had made a commitment to undertake liberalization programs, which the other member nations were anxious to see begin. Autos were of particular interest.

In the same year, the auto producers' top management and members of the Liberal Democratic Party established the Automobile Industry Policy Conference, a forum for exchanging policy viewpoints on the growing auto industry. Mr. Tanaka, the Party's secretary-general, and Mr. Akagi, research chief for political affairs, headed the LDP's participation while Nissan's president, Mr. Kawamata, and Toyota's president, Mr. Nakagawa, led the industry's representation. The Conference, interpreted by some as a political campaign fund raising operation, permitted the industry to carefully and intimately present its case for protection. It was typical of the informal, quasi-institutional forms of communication between business and government.

Although the LDP was acquiescent of continued protection of the industry, the political parties did not play a major role in the liberalization debate. No major party was uniformly active in support of or hostility toward the industry's protection. The industry itself had little direct representation such as the textile industry has enjoyed. Moreover, the auto liberalization issue was managed within government by the appropriate Ministries and the Cabinet.

In 1967, the year of Japan's first round of capital liberalization, the United States sent to Japan a delegation headed by Ambassador Philip Trezise, U.S. Representative to the OECD, to persuade the Japanese to reduce auto import and capital barriers. During the ensuing eight months of discussions between the two countries, MITI and the domestic producers demonstrated their most complete unity during the postwar period. They were in accord on both the minimum boundaries of protection and on the terms of acceptable concessions. MITI and the industry agreed to accelerate putting into effect the full reduction on auto tariffs of 50% negotiated during the Kennedy Round. Those tariffs were reduced from 35% to 17½% effective April 1, 1969 instead of progressively over a 5-year period ending January 1, 1972 as prescribed in the General Agreement on Tariffs and Trade. The auto duty was later unilaterally reduced to 10% effective April 1, 1971. The Japanese also agreed to liberalize the auto-engine and auto-part import quotas in three steps leading to their complete elimination by 1971. This was, however, an empty concession for American producers considering that they continued to be prohibited by foreign investment restrictions from establishing adequate auto assembly facilities in Japan.

At the same time, MITI and the industry were denying the American request for capital liberalization, the Keidanren was voicing its support for continued protection. The auto industry was not a traditional one, and

its position in the Keidanren was not inherently strong. The Keidanren however did acknowledge the advantages for Japan of continued protection of the industry. The industry's structure remained weak with several struggling producers vulnerable to the dominating management influence of foreign capital. The consensus, although not unanimous, within Keidanren favored preserving the continuity and integrity of Japanese management of large domestic corporations. The concern was that foreign management might disrupt traditional relations between the large auto producers and its labor, parts affiliates, and banks. Consequently, as long as secondary manufacturers remained fragmented and hence vulnerable, the Keidanren in particular and the business community in general opposed auto liberalization.

The congruence of policy positions between MITI and the manufacturers was paralleled by the general agreement among the manufacturers themselves. During the postwar period the Automobile Industry Association—the manufacturers' trade association and formal link with MITI—had experienced little unanimity. Manufacturers had usually been in conflict of interest over proposed consolidation programs and draft legislation involving auto producers and parts affiliates. The producers varied widely in size, success, attitude toward foreign technology, and cooperativeness with MITI. On the issue of capital liberalization, however, their positions were closely aligned from the start. Mitsubishi's defection in 1969, discussed below, was the first major break in this pattern.

In 1969, however, the political and economic conditions which had supported the policy community's uniform resistance to auto liberalization began to deteriorate. The futile attempts at consolidation of the last two years and MITI's failure to group the industry around Toyota and Nissan indicated to some, at least to Mitsubishi, that consolidation in the short run was not probable. The search for alternative strategies for survival among remaining independent producers—Mitsubishi, Toyo Kogyo and Isuzu—was the logical consequence. In the United States impatience with Japan was growing. During the course of an official visit to Japan in the spring of 1969, Secretary of Commerce Stans tried to persuade Prime Minister Sato and MITI Minister Ohira to accelerate auto liberalization.

Moreover, other significant bilateral issues had surfaced in which Japan had a critical interest and the United States had considerable leverage. The textile export restraint problem and, in particular, the imminent negotiations on Okinawa reversion presented compelling policy tradeoffs to the Japanese government. At the same time, continued protection appeared less and less defensible to the United States. In 1968, Japanese auto exports to the United States more than doubled while total passenger car production exceeded two million units for the first time.

**Mitsubishi Ties up with Chrysler.**—The impact of these changing conditions was eventually decisive. In May, Mitsubishi Heavy Industries announced its intention to affiliate with Chrysler by spinning-off its auto



division and selling substantial minority shareholdings, eventually 35%, to the American company. The announcement was highly significant. First, the affiliation, if successful, would be the first in which a major Japanese corporation had given substantial equity in an existing firm to foreign capital. This would be a precedent of enormous importance far beyond the auto industry. Second, the announcement was conspicuously hostile to MITI and severely damaging to its remaining hopes of consolidating the domestic producers before capital liberalization. Mitsubishi's move threatened to negate liberalization of joint venture foreign investment even before it became a reality. The alternative (to consolidation) survival strategy for secondary auto producers in Japan had dramatically surfaced.

It is interesting that Mitsubishi became the first to defect from the producers' agreements with MITI that they would not affiliate with the Big Three. Mitsubishi had previously disregarded MITI's guidance earlier in the 1960's when it entered a joint venture with Caterpillar to produce heavy construction equipment. Mitsubishi had attempted and failed in domestic affiliations with Isuzu and Fuji.

After the Mitsubishi announcement, the unanimity for protection gradually, but not immediately, eroded. Despite attempts by the executive council of the Automobile Industry Association and members of the Keidanren to demonstrate the solidarity and similarity of their positions, a pro-liberalization group within Keidanren was emerging. Led by Mr. Okumura, former president of Nomura securities, and Mr. Tashiro, former president of Toyo Rayon, this group challenged the conventional wisdom on liberalization. The dissenters cautioned that continued intransigence might jeopardize other critical interests, particularly Okinawa. The dissenting group gained strength and the Keidanren consensus became increasingly liberal.

The manufacturers themselves were forced to reconsider. Toyota and Nissan remained firmly opposed to liberalization and were opposed to Mitsubishi's move. Neither joint venture liberalization nor direct affiliation with foreign capital by their competitors was in the interest of the two dominant firms. The former created a new competitor and the latter presumably strengthened an existing one. Toyo Kogyo and Isuzu, in a different position, however, recognized the inevitable competitive implication. Toyo Kogyo began to strengthen its existing relations with Ford and came to support liberalization. Isuzu, whose partial production tie-up with Nissan was in difficulty, began to look abroad.

The most profound impact of the announcement was on MITI and the Cabinet. MITI not only suffered the coup de grace of its domestic consolidation program but, at the same time, was presented with a potential "second textile issue". The foreign capital problem in the automobile industry suddenly escalated from an orderly campaign to delay liberalization to the specific issue of authorizing, or failing to authorize, proposed



capital affiliation of two of the world's largest companies. A specific American interest had been established inside Japan. MITI's rejection of this specific affiliation could cause reprisals, especially in the Okinawa and textile political context. The delicacy of the situation had increased.

Both the political costs and perceived futility of continued opposition to liberalization grew. The Cabinet dropped its opposition to liberalization. The Ministry of Finance's Foreign Investment Council, which is responsible for foreign capital transactions, recommended that auto liberalization be scheduled for April 1971, advanced from its previously optimistic date of October 1971. The Keidanren urged early liberalization. A MITI vice-minister publically commented that the consolidation plan was officially defunct. The liberalization question gradually passed from serious controversy.

The liberalization debate was succeeded by the arrangement of similar capital affiliations by Toyo Kogyo with Ford and Isuzu with General Motors. With liberalization inevitable, MITI's efforts turned to these proposed tie-ups. It is doubtful that MITI or the Cabinet even considered rejection of the applications as a realistic outcome. The government retains case-by-case approval jurisdiction over foreign capital investment in excess of 7% in existing firms and could formally have disallowed the Big Three's entry. Rejection however was not prudent. The policy community's consensus for continued protection had been disturbed. Three major Japanese firms, in order to competitively survive, were legitimately seeking foreign partners. Meanwhile other issues of critical interest to the Japanese remained unsettled with the United States. Rejection would not have been well received domestically or internationally.

MITI did however seek to affect the terms of the proposed affiliations. The fundamental Japanese objection to foreign capital is management control. One purpose of foreign investment constraints is to avoid non-Japanese control of domestic assets, employees, distribution channels, and technology. In the three auto affiliations, American management personnel will be resident in Tokyo. In addition, under Japan's Commercial Code, 25% ownership confers cumulative voting rights for director appointments while 33⅓ % gives the shareholder veto right over special resolutions.

The government has tried to minimize the prospect of foreign management control by both limiting the share of foreign ownership and consolidating widely-held domestic holdings. MITI did counsel the Japanese firms on appropriate foreign share levels but with little apparent impact. Two of the three agreements—Mitsubishi-Chrysler and Isuzu-General Motors—specify foreign equity shares in excess of 33⅓ % despite MITI's initial opposition. Both agreements have been approved, giving Chrysler 35% by 1973 and GM 34.2% upon consummation. Toyo Kogyo, which has temporarily suspended negotiations with Ford, has all along considered a 20% foreign interest appropriate.

The threat of foreign take-over through acquisition of additional shares in the market does not apply to Mitsubishi-Chrysler, but certainly does to Isuzu-General Motors. While Mitsubishi Heavy Industries will own the remaining 65% of the spun-off auto division, the Japanese shareholdings of Isuzu are widely and thinly distributed. The largest ten shareholders collectively hold less than 25% of the stock. At the time Isuzu and GM announced their intention to tie-up, MITI admittedly had not formulated contingent policy to deal with the threat of a take-over, which helps explain the Ministry's subsequent request that the two firms delay their formal application.

As a short-run palliative, MITI has recently proposed that Japanese shareholders assign their fragmented holdings to a voting trust, creating a countervailing block to GM. This improvisation is not, of course, a lasting solution to MITI's problem; GM can still purchase these or any additional outstanding shares. It is likely, too, that GM will seek to enlarge its ownership share. Although under the present agreement with Isuzu, GM may not acquire additional shares for an unspecified but not unlimited period of time, one can easily imagine situations of competitive urgency in the near future when Isuzu's management, short of capital but hopeful of recovery, must invite an additional investment of General Motor's capital in the firm. The price to Isuzu would no doubt be a higher equity ceiling for General Motors.

The Isuzu-General Motors case bears close watching in the future. It is not at all clear that the Japanese government can successfully resist an attempt by GM to increase its equity if Isuzu chooses to permit it. Even assuming the continuity of the foreign investment control apparatus, it may be difficult for MITI to deny a client manufacturer the capital or technology or management it seeks from its partner in order to survive or improve its position. Certainly MITI's recent search for a means of stabilizing domestic Isuzu shareholdings indicates that it regards the problem as very real. To further complicate the picture, Toyota has recently announced its intention to acquire in the market Isuzu shares. One can speculate broadly on the intent and probable results of this development.

**The Future of the Industry.**—A frequent lack of unanimity over basic policy issues within the community of government agencies and auto producers is one salient fact which emerges from this history. Fundamental policy differences arose on the issues of postwar domestic industry development itself, consolidation of the manufacturers, during the 1960's, and the timing of capital liberalization. On these issues, MITI's position was aggressively in support of the auto industry sector, the interests of which were not always synonymous with those of individual producers. The manufacturers' positions followed their individual interests while the other Ministries—Transportation and Finance—responded to a larger constituency, either the Japanese consumer or the Japanese economy.

This not surprising distribution of positions is reflected, too, in the industry's present situation.

The auto industry in 1971 appears to be at the end of one stage of development and faces the uncertainty implied in entering another. The rapid expansion of domestic passenger car demand and the insulation from foreign capital are just ending. Significant growth in production in the future must come from exports which at present account for only slightly more than one-fifth of production. The internationalization of Japan's auto markets is only just beginning: nearly half of passenger car exports come to the United States while Europe, of course mainland China, and even South America remain large but undeveloped potential markets. The export share of Japanese auto output will rise significantly through the 1970's.

An auto era has ended in another, perhaps equally significant way. Attitudes toward the industry within government generally are growing more critical and less supportive. A number of factors underlie this shift. One is the recognition that the industry has grown up and should naturally receive less policy favor. Another is the reaction to the domestic problem of air pollution and urban auto congestion. (The number of cars per unit of livable space in Japan is already five times as large as in the United States.) Still another is the burden which the long-lived barriers to foreign capital and, to some degree, the rapidly growing flow of autos into the United States have imposed on Japanese officials in their dealings in the international political economy.

The Ministry of Finance, the most international of the economics-related agencies of government, demonstrates less support of the industry than before. Earlier this year the Ministry discontinued several tax regulations favorable to auto exports, including special accelerated depreciation schedules for export-related capital installations and special tax-free income reserves for overseas market development. While these suspensions will affect many industries, the impact on autos will be relatively heavy. The decision was made with the auto implications admittedly well in mind. In 1969, Toyota alone reserved over \$21 million of income under special depreciation and export market cultivation provisions.

In addition, the Ministry of Finance supported a heavy increase in auto purchase taxes earlier in the year. The tax, designed to finance badly-needed road construction and perhaps to depress new car demand, was initially proposed by the Liberal Democratic Party's committee on taxation. The Finance Ministry handled the proposed legislation administratively and received petition and informal communication against it from MITI and the Automobile Industry Association. The Ministry of Transportation lent its support to the measure. Despite the opposition of MITI and the other political parties who proposed its regressive effect on consumers, the new tax was enacted. The Ministry of Finance was unusually active in its support.



In addition, the Japan Development Bank's outstanding credit to the auto and auto parts sector has declined as the Bank shifts its resources out of established manufacturing industries into new growth areas, particularly social overhead capital areas like urban redevelopment and distribution system modernization. The Bank is officially within and responds to the Ministry of Finance.

MITI's Bureau of Heavy Industries however remains aggressive in its support of continued auto industry development. MITI opposed the suspension of the export tax incentives and the imposition of the new auto tax. More significantly, MITI has taken an active role in the development of a new automobile engine technology. The Ministry's Agency of Industrial Science and Technology currently has underway a major R & D project on the battery powered automobile. The project, done in cooperation with both auto manufacturers and electrical equipment manufacturers, is currently one of the Agency's two largest. MITI's subsidies to the project are currently budgeted at roughly \$14 million over three to five years. The direct financial support of government to this technology development is characteristically modest in amount. The nature of the project is significant in our context: MITI and several of the country's largest firms from two major industries working together to develop a new automotive technology.

The continued success of the industry, then, must derive from a new set of conditions. The assimilation of foreign capital in the industry, the development of a new or at least fundamentally improved automotive technology, and the penetration of new and broad international auto markets are the industry's major challenges upcoming. The coming of the Big Three to Japan as late as 1971 underlines this point. General Motors, Chrysler, and Ford could not, apparently, have justified their initial and projected continuing investments in Japan on the sole basis of producing conventional passenger cars for the domestic market. The attractive growth is history and the market is already dominated by Toyota and Nissan. The ability to displace them is very limited. Certainly the American producers must anticipate new regional and technological areas of competition and that Japan is accordingly the place to be.

#### **PROFILES OF JAPAN'S MAJOR AUTO PRODUCERS**

(Data for Year Ended March 31, 1971)

	<b>Toyota</b>	<b>Nissan</b>	<b>Honda</b>	<b>Toyo Kogyo</b>	<b>Isuzu</b>
Corporate Sales <sup>1</sup>	2,326M	2,220	879	616	552
Total Assets <sup>1</sup>	1,135*	2,044	588	1,067	609
Profits After Tax <sup>1</sup>	108	79	34	25	5
Paid-in capital <sup>1</sup>	113	111	51	71	69
Profit % Sales	4.6	3.6	3.8	4.1	0.9
Annual Growth (5 yr. average)	27.6	24.9	20.6	18.4	15.4
Market Share	31	26	9	9	4
Employees	38,168 <sup>2</sup>	45,873	18,150	28,384	12,307

<sup>1</sup> Value in thousands of dollars.

<sup>2</sup> Toyota Motor Company only, exclusive of Toyota Sales Company



# The Expansion of the Japanese Steel Industry

鉄鋼

## Introduction and Summary

Government-business cooperation in the steel business traces its origins to government control of the industry before and during the Second World War. Post-war cooperation was first a response to the need to restore the industry's production and secure raw materials. Financial assistance through government lending channels and fiscal incentives to the growth of individual producers were made available. However, except for the immediately post-war massive recovery subsidies, the modern period has seen no significant direct investment, subsidy, or control on the part of the Japanese government.

The major function of government has been to circumscribe and influence the capacity expansion decisions of private producers. The tendency toward temporary over-capacity has been strong since the middle-1950's, and MITI's function of restraint and reconciliation of the varying growth ambitions of steelmakers has been its major contribution. Production cartels for specific product items for limited periods of time have been instituted by the Ministry. In regard to the acquisition of long-run raw material supply sources and the voluntary control of exports, the role of the government bureaucracy has been slight.

Other elements of government have been active in the steel industry, particularly the Ministry of Finance with respect to its financial assistance and fund sources and the Fair Trade Commission with respect to its structure and competitive behavior. The Fuji-Yawata merger in 1969-70 represents a major episode in MITI's effort to consolidate Japanese industry as the domestic economy is liberalized toward international competition. MITI's effort placed it in opposition to the FTC whose responsibility it is to interpret Japan's Anti-Monopoly Law. The Yawata-Fuji merger was a landmark event legally but not economically. The merger has made little real difference in the industry.

## Historical Role of Government In Japan's Steel Industry

**Pre-War Pattern.**—Government has been directly and heavily involved in Japan's steel industry since the origins of industrialization one hundred years ago. The reasons lie in Japan's accelerated consumption requirements for steel and the country's original natural handicaps in producing it.

Steel is traditionally the *sine qua non* of industrial development and military adventure. Japan's sustained and rapid rate of industrialization and her periodic military episodes created large, often sudden demands on steel production. The country, however, has little iron ore and only limited coal deposits, hence domestic production has required from the

beginning the import of basic materials. The small production scale and the logistics of raw material acquisition made early Japanese steelmaking decidedly uncompetitive. Private capital was not attracted in significant amounts to steelmaking until the twentieth century. The Japanese government in order to ensure an adequate steel supply directly or indirectly controlled the industry for nearly the entire period from the Meiji Restoration through the Second World War.

At the turn of the century, the government established Japan's first large modern mill. The Yawata Mill dominated production, the remainder of which was shared among older state-owned and scattered private mills. The mill was built on the northern coast of Kyushu to eliminate the over-land haul of ore and coal from mainland China. Finished steel imports exacerbated the chronic foreign exchange problem, so the government subsidized the Yawata mill for ten years until its operations were reasonably competitive with imports.

World War I launched the steel industry in Japan as requirements rose dramatically and imports of finished steel from Europe diminished. All of today's major private firms including Fuji (later merged with Yawata into Japan Steel), Sumitomo, Kobe, Kawasaki, and Nihon Kokan were established in the first fifteen years of the century. Production was stimulated by special wartime tax exemptions.

Overcapacity, which plagued the industry during the 1920's, became critical during the depression of the early 1930's. The government responded with the Important Industry Law of 1931, conferring on the government the authority to organize production and allocate markets. In 1934, the Japan Steel Company was organized by consolidating Yawata with the six largest private steel companies. The state was directly responsible for its creation and, through Yawata, owned 70% of the consolidated firm. War with China in 1937 enlarged the role of the state's bureaucracy in the industry. The Ministry of Commerce and Industry, MITI's predecessor, both allocated production among steelmakers and rationed output to end-users during the military build-up of the late 1930's. In 1941, full operating control passed to the government and remained there throughout the war.

The pre-war pattern, then, was one of not simply close cooperation but of frequent direct control. The management of steel producers was accustomed to reporting alternately to shareholders and government officials. The necessity which Japan faced of rapidly expanding wartime production and allocating imported raw materials among producers drew government into the industry's operations. The practice of placing former vice ministers of government on the boards of large manufacturing firms had its origins in the immediate pre-war period, and the steel industry was the leading practitioner. Until its dissolution at the war's end, Japan Steel Company was effectively an extension of the Japanese government.

**Post-war Recovery.**—Steel was identified early in the post-war period

as an absolutely critical redevelopment priority. In August 1945, only three of Japan's thirty-five wartime blast furnaces were in operation. Significantly, the decline in production had resulted more from disruption of raw material supplies into Japan than from destruction of the plants. Japan's industry had been turned off at the port. Consequently, the problem was not to rebuild the nation's steel capacity but to restore them to production.

One of the first major post-war joint economic policies of the Japanese Cabinet and the General Headquarters of the Allied Powers was to designate steel, coal, electric power generation, and chemical fertilizer as the key recovery industries. The underlying programs were developed by the Economic Stabilization Agency, a competent group of bureaucrats and planners which eventually became the Economic Planning Agency. In designing the programs and allocating the scarce financial resources, the Agency received the opinions of the Ministry of Commerce and Industry representing the manufacturing sectors themselves. The executive decisions on allocation were made at the Cabinet level.

Funds for steel industry rehabilitation came from two broad sources: government subsidies and a mixture of government and private borrowings. The post-war production cost of steel exceeded both the pre-war level and, more importantly, the economically desirable level for supplying the critical basic material in Japan's reconstruction. Consequently, subsidies were provided at both the steel resale price level and the imported raw material level. The critical subsidy was the former: from 1947 through 1950, the cumulative price of steel to end-users was reduced by over one-quarter of a billion dollars from producer cost levels. This sum represented nearly 30% of all price subsidies awarded to strategic post-war industries including coal, fertilizer, power, and food. Coal price subsidies, which accrued indirectly to steel producers, accounted for an additional 15%.

Renovation of existing capacity was financed by a mixture of debt instruments. The Reconstruction Finance Bank, a government financial institution, responded to the Cabinet's designation of priorities and became the single major creditor of the industry during the immediate post-war period. The commercial banks themselves loaned roughly \$14 million to the industry from 1947 to 1950. Private bank capital was scarce just as the government's reconstruction budget, and Tokyo's city banks responded to the administrative guidance of the Bank of Japan in directing funds to the economy's various sectors. A strong, almost tacit consensus existed on the necessity to completely restore production in the vital industries.

There was a distinction, however, between restoring capacity and expanding capacity, and it was this issue which occasioned the first visible policy disagreement over the recovery strategy for the steel industry. The post-war inflation caused the government in 1949 to cut back the econo-



my's recovery program. As a result, the steel industry which by 1949 had roughly recovered its 1935 production level of 4.7 million crude metric tons, experienced reduced price and import subsidies, causing the cost of steel to rise and the demand to fall. The industry was bullish and, along with the steel officials within the Ministry of Commerce and Industry, was reluctant to retard the recovery. The steel producers sought not only to reach wartime production levels in the short-term, but in addition some wanted to expand steel capacity.

Yataro Nishiyama, president of Kawasaki Steel, which was and remains an aggressive firm, announced his intention to build a major new steel plant, the first substantial capacity increase since the war. The Bank of Japan, under the direction of Hisato Ichimada who was nicknamed "The Pope" in light of the Bank's powerful influence at the time, had helped to initiate and strongly supported the deflationary economic policy. The Bank discouraged the expansion, pointing out its inflationary effect and the existing unutilized industry capacity. Kawasaki, seeking to gain market share, argued that domestic demand would rapidly increase after the temporary countercyclical policy expired and that adequate construction lead time recommended Kawasaki's plan.

Kawasaki did build its plant. The Bank of Japan continued to advise against it but did not attempt to impose its position on Kawasaki's banks, and the plant was financed domestically. Kawasaki emerged prophetic when shortly after, in June 1950, the North Korean Army entered South Korea. American military procurement dramatically increased the demand for steel as it did for trucks, and the economic policy shifted to reflect these new military requirements. The Cabinet instructed MITI to develop a growth strategy for the steel and other key industries. Government bureaucrats and steel industry managers shared common objectives and perceptions of the measures required to stimulate investment in steel capacity. The program which emerged was known as the industry's First Rationalization Plan.

**First Rationalization Plan.**—The Plan's objectives were to increase the productivity of existing plants and stimulate the formation of new capacity. Assistance by government was in two categories: broad tax and duty exemptions and loans from government financial institutions.

The origins of these tax measures illustrate the Japanese procedure for formulating and enacting tax legislation. The positions of industry on prospective measures are communicated usually at the bureaucracy level, including MITI, the Ministry of Finance, and the Cabinet's Special Committee on Taxation. Direct lobbying with Diet members occurs but is not the fundamental communications link in the tax legislation drafting process. In the case of steel, the Ministry of Finance solicited the position of the steel industry and MITI's steel officials. The sharing of objectives was strong in this case, and consensus was achieved among the Ministries and the Cabinet's Special Committee. This Committee, which now has roughly

70 Dietmen including a small number of tax experts as members, is the critical link. The parliamentary majority of the Cabinet party and the deference of the dominant party to its Taxation Committee normally ensure passage of measures agreed to at the Committee level.

The tax measures applicable to steel were actually proposed by a study group within the Ministry of Finance after examination of other nation's tax systems. The series of five tax and duty exemption measures, either partially or wholly aimed at the steel industry, was enacted in 1951–1952. A brief summary of the measures follows, illustrating the flexibility of Japanese fiscal standards across industries:

- import duty exemption on designated steelmaking equipment (60 percent of such equipment was imported at that time);
- 50% increase in depreciation base allowed on designated equipment;
- reserve for price changes in inventories and securities established as tax-free contingency measure;
- revaluation of assets permitted, effectively increasing the depreciation base;
- additional bad debt reserves permitted.

The effect of these measures was to increase the funds from operations available for re-investment and, in particular, toward specific types of investments. Over the five-year period (1951–1955) of the First Rationalization Plan, internal funds generation accounted for one-quarter of the \$145 million capital expenditures in the industry. Another 10% was financed through new equity issue while the remaining two-thirds was through debt instruments. It is evident that Japan's steel industry, now well-known outside Japan for its aggressive high-debt financial policies, was forced to accept high debt levels at an early postwar date in order to finance its growth.

The borrowings from government financial institutions during this period were characteristically large in amount and influenced private commercial banks to make similar loans. The Japan Development Bank, the Industrial Bank of Japan, and the Long Term Credit Banks—all governmental or quasi-governmental banks—lent to the steel industry and accounted for roughly half of the \$95 million in debt undertaken during this period. Commercial banks were encouraged to finance the steel expansion, and the Ministry of Finance permitted \$11 million of foreign exchange loans to the industry.

In evaluating the First Rationalization Plan, one must note not only the doubling of crude steel production from 4.8 to 9.5 million tons but also the appropriate and effective role the government played during the period. While the bureaucracy continued its close working relationship with the steelmakers, the government avoided the role of direct central planner and concentrated instead on mobilizing financial resources and creating financial incentives for growth. Government and private financial institutions were persuaded to provide funds to the industry, but the final

judgment on the specific borrower and the amount was that of the bank, particularly among the commercial banks. The tax measures are a case in point. The reserve and special depreciation measures favored growing firms at the expense of stagnant firms. So long as firms invested in the designated types of equipment, the additional cash flow from tax and tariff shields was significant.

**The First Appearance of Price Instability.**—Steel remained an industry of critical policy interest, and a Second Rationalization Plan for 1955–1960 was developed by MITI and the industry. It was during this period that Japan's steel industry began to develop its modern, efficient steelmaking capability. Capacity more than doubled over the five years. Moreover, Japan's investment per ton produced was easily the highest in the world over the period and nearly twice that of the United States. This pattern would continue through the 1960's, giving Japan an increasingly modern steelmaking capacity relative to the United States.

The late 1950's are also notable for the first post-war appearance of temporary over-capacity and the resulting creation of one of the oldest cooperative arrangements in the industry called the public sales system. The mild recession of 1957, when Japan's economic growth rate receded in the midst of the steel capacity boom, created a serious over-capacity situation. Because Japan's steelmakers operate with exceptionally high fixed financial and labor costs, and because rapid trend growth was encouraging larger regular increments to capacity, the cash flow crisis resulting from substantial under-utilization was severe. Prices became extremely flexible downward in an attempt to restore normal operating ratios. As the crisis deepened, severe price-cutting began to appear.

Self-motivated collusion among firms to restrict production and stabilize prices would have violated the Anti-Monopoly Act, the anti-trust legacy of the Occupation. MITI held informal consultations with industry management in search of a solution, and the public sales system emerged. Under this arrangement, steel producers reported their scheduled monthly production levels to MITI along with price schedules. Prices were made public, and the industry's entire monthly output was to be sold at the announced prices. It is instructive and characteristic that production limits and price levels were not made unilaterally by MITI. Lengthy discussions usually preceded shifts in the announced levels.

Although the public sales system has survived in one form or another since 1958, its effectiveness has been understandably mixed. The system has been largely called upon during over-capacity where it has dampened, but by no means eliminated the spread between announced and actual prices. During normal growth, Japanese steel prices have demonstrated a steady long-term decline as scale improvements, rapid increases in labor productivity, installation of modern steelmaking capacity, and progress in raw material logistics have significantly reduced the cost of making steel



in Japan. Given normal economic conditions, "price fixing" or "price-controlling" does not accurately characterize Japanese domestic price competition.

## **Problems of Industry Expansion and Structure in the 1960's**

**The Politics of Capacity Additions.**—Perhaps the most durable and visible dimension of government-industry interaction in the steel sector is the capacity expansion approval exercise. Since the post-war recovery period, it has been obvious to both ministries of government and management of steelmakers that a joint determination of the rate of capacity additions was in the interests of both. The macroeconomic impact of steel expansion's massive financial requirements and of any imbalance in demand and supply of steel dictated that the government influence the growth rate of capacity. On the other hand, the cash flow crises and price instability which follow over-building usually persuade the steelmakers to cooperate among themselves and with MITI. There remains a general, although not always unanimous, feeling among producers that consensus with government on capacity decisions is desirable and prudent.

The process, although it has shifted somewhat over time, is roughly as follows. Representatives of the privately-owned steel producers gather within the Japan Iron and Steel Federation to tentatively present and discuss investment intentions for the coming year. Nothing is decided at this meeting or series of meetings, but the producers' plans are evaluated in view of the demand outlook for the industry and the existing pattern of market shares. Often these representatives, usually managing directors, are MITI alumni. Subsequent to these meetings and informal discussions among management and officials of the Iron and Steel Section of MITI's Heavy Industries Bureau, the presidents of the steel producers will seriously discuss and seek consensus on the rate and timing of individual producers' major investments. MITI will participate ex-officio in these meetings, bringing its point of view to bear. The periodic frequency of consensus meetings at both levels varies with the complexity of the problem. In times of crisis, meetings are continuous.

After a consensus is reached, a report is traditionally issued by MITI recommending a course of action to the industry. In recent years, this report has been prepared by the Iron and Steel Subcommittee of the Industrial Structure Council. The Council is organized within MITI and reports largely to the vice-ministerial level as policy advisory group. The Council's membership includes officials from several ministries including Finance, prominent businessmen, leading academicians, and others. The report considers the several interests represented in evaluating the consensus reached within the industry.

This process should not be viewed in terms of the Western public



versus private dichotomy. The government neither plans nor dictates the rate of capacity expansion. The Industrial Structure Council does not unilaterally and formally accept or reject the industry's consensus, but rather evaluates it in view of Japan's wider economic objectives. Some observers of the industry suggest that no application for a capacity increment from a major firm has ever been flatly rejected, although some have been delayed. This, of course, is the mechanism of the consensus process: the expanding firm is either persuaded to delay his application or is persuaded to accept a delayed approval. When this persuasion doesn't materialize, consensus is frustrated.

Among the sanctions or sources of authority which government claims in this process, some are official while others are simply traditional. Among official instruments of policy, MITI's control of imported raw material allocations is critical. Japan currently imports 98% of her iron ore requirements and 84% of coal needs. Until 1965, MITI directly controlled the importation and allocation among producers of both ore and coal through the mechanism of foreign exchange import quotas. MITI retained the controls on heavy coking coal until October 1971. In this way, MITI could control the rate of production, and hence the rate of expansion, with reasonable effectiveness.

Foreign exchange control also permits the Bank of Japan to limit steel producers' borrowing from foreign banks. Foreign capital has been a significant source of Japanese steel growth, accounting for roughly 8% of total capital funds during the 1950's. The Bank of Japan establishes queuing rules for access to these funds and limits the rate of lending by individual foreign banks. Morgan Guaranty's large loan to Nippon Steel, for example, is scheduled over a five-year period in accordance with the Bank of Japan's regulations.

The Bank of Japan and the Ministry of Finance bring a macro-economic and international payments balance perspective to the discussions regarding financing of steel expansions. While MITI's international perspective focuses on the relative competitiveness and growth of Japanese steel, the financial authorities share broader concerns. Hence, in 1970, the Bank denied requests for increased foreign borrowings in order to avoid undermining its domestic deflationary policy and depress the rate of increase in dollar reserves. This forced the delay of capacity additions, some of which will be further delayed through 1971 in view of continuing soft demand.

The influence of the steel industry's traditional relationship with the bureaucracy, and in fact with the broader economic policy-making community in and out of government, should not be overlooked. Their mutual recognition of Japan's dependence on steel is well-founded. Early in 1970, steel makers' preliminary capital budgets for the next five years indicated that a full 10% of Japan's total capital investment for the period would be in steel capacity. The industry has been easily the most

critical element in Japan's remarkable postwar economic phenomenon. Its impact on the international competitiveness of Japanese ships, autos, bearings, and machinery has been profound. It is at once one of Japan's biggest importers and exporters. It dominates Japan's domestic funds flow accounts much like the U.S. government dominates domestic capital markets. Recognition of its critical position has been strong. If the thesis that Japan's leaders of business and government share common perceptions of Japan's national interest has any validity, it must apply to Japan's traditional steelmakers.

**Sumitomo Challenges.**—This unusual relationship between MITI and the industry, however, should not be extrapolated to all steelmakers in all circumstances. A case in point is Sumitomo's recalcitrance of the middle 1960's.

Sumitomo is perhaps Japan's most aggressive steelmaker. Since the middle 1950's, the company has outperformed the industry in profitability, modernity of its facilities, export sales, and market share (as the table below shows). Of the six firms listed below Sumitomo and Kawasaki have both increased their shares.

	1958	1967
Yawata	24.0%	18.6%
Fuji	18.1	17.0
Sumitomo	5.7	11.0
Kawasaki	8.0	11.0
Nihon Kokan	10.0	11.0
Kobe	6.0	5.4

Unlike other steel companies, Sumitomo has not employed former government officials. It has tried to remain as independent as possible of MITI's administrative guidance and has vigorously sought, and evidently achieved, capacity additions at a faster rate than the industry. Although the industry's deliberations are not public, it is known that the criteria for allocating new additions when planned expansions exceed projected demand are present market share and current operating performance in some unknown, and probably highly variable combination. While the latter clearly favored Sumitomo, observers of the industry insist that at least part of Sumitomo's market share gains resulted from the pronounced expansionary restraint, even acquiescence, of the larger, more conservative steelmakers.

In 1965, Sumitomo challenged the industry consensus. The recession of 1964-65 hit the steel industry particularly hard, and the Japan Iron and Steel Federation created a special committee to develop an investment schedule for the next five years. The committee recommended that steelmakers delay all new investments in rolling facilities. The industry adopted this position and approved no new investments except those

replacing existing capacity. Sumitomo, one of three firms then modernizing its facilities, continued its installation which technically was a replacement but in fact substantially improved productivity. In addition, the firm continued to increase production while the larger firms moved more cautiously. Production cartels in several product areas were in effect at the time, and the general industry pattern was to avoid price instability by moderating production levels.

Early in 1966, Shigeo Nagano, Fuji Steel's president, attacked the expanding firms, Sumitomo in particular, for not observing the industry agreement. Nagano, reacting to developments over several years, suggested that production cartels and industry consensus meetings were inadequate constraints on the aggressive smaller steelmakers and that the fundamental problem of overcapacity would not be resolved until special legislation governing steel investment was enacted.

Nagano's proposal was not well received. Hosai Hyuga, Sumitomo's president, remonstrated, pointing out MITI's already thorough involvement in the industry's affairs. Hyuga defended Sumitomo's record of superior profitability and growth which were the critical determinants of Japan's growing international competitiveness and recommended greater producer autonomy in investment decisions.

Reaction within MITI was mixed and illustrates well the variation of MITI policy positions as top officials change assignments. Outgoing Vice-Minister Shigeru Sahashi defended the existing system of industry consensus under the Ministry's watchful eye. Others within the Ministry, however, used the occasion to propose a consolidation plan for the steel sector. A study committee of the Industrial Structure Council argued that increased integration of rolling mills and specialty steel producers into groups around the large blast furnace operators, then a consolidation of these integrated firms into three or four very large steel producing groups would alleviate the problems of capacity regulation and price stability. This plan was rejected by the industry and tabled within MITI.

The Fair Trade Commission opposed either restrictive legislation or consolidation of producers and reiterated its disapproval of existing production cartels, all of which jeopardized the competitiveness of the industry.

Neither Nagano's nor the Industrial Structure Council's proposals were acceptable at that time to the majority of industry or government officials. The consensus system struck a balance between autonomy and control which was uniformly tolerable. The system was susceptible to uncertainty and violation as the Sumitomo case demonstrates. Sumitomo continued to build its new facilities and produce aggressively. MITI disciplined the company by limiting its allocation of imported coking coal to what it considered appropriate levels. Before Sumitomo really felt the effect of this action, however, demand for steel recovered sharply and by 1967

Sumitomo's additional capacity was needed to meet domestic requirements.

Sumitomo continues to invest aggressively, and the current phase of the "Sumitomo problem" involves the company's request to install an additional furnace at its modern Kashima works to achieve full economic scale. Industry deliberations on the issue have deadlocked, and the matter recently was referred to the Industrial Structure Council for study.

**Yawata-Fuji Merger.**—The overcapacity issue continued to plague the industry. The root of the problem was not simply the expansionary industry mavericks but the increasing size of the minimum, efficient size installation. The government's inferred policy of trying to roughly maintain market shares, with some correction for performance, by permitting simultaneous or nearly simultaneous expansion among all producers was increasingly frustrated by the dramatic growth in optimal size installations. The situation in 1967 underscored the problem. Eight steelmakers sought approval to begin building new furnaces, but according to MITI's projections only two were needed. Five received approval, one with a year's delay.

The Industrial Structure Council's report recommending consolidation of the industry was reinforced later by the Industrial Problems Study Committee. The Committee, formed in 1966 and known as the Sanken, is perhaps Japan's most prestigious business policy group. Its membership was twenty-four presidents or chairmen of major corporations. Its purpose of independent study of critical economic problems facing Japan focused early on the steel investment problem. A steel subcommittee under Nakayama Sohei, chairman of the Industrial Bank of Japan, argued in 1967 that a concentration of the industry was necessary if Japan was to conserve investment resources and achieve international competitive superiority in steel. It should be noted that the presidents of both Yawata and Fuji are members of Sanken, hence the Sanken position is at least partially a response to the aggressiveness of Sumitomo and Kawasaki.

Despite these forebodings, the announcement in April of 1968 by Yawata and Fuji of their intention to merge was generally regarded with surprise. There were credible grounds for surprise. The merger would give a single producer over one-third of Japan's crude steel capacity, a level of dominance which the FTC would presumably oppose. Analysts who maintained that a merger of large, already integrated producers would not alter the economics of steel production in Japan had assigned a low probability to the merger. In addition, a vague reluctance to revive the prewar Japan Steel Company by consolidating the industry around the formerly state-oriented Yawata had somehow obscured the reality of the merger possibility.

The early response to the announcement was acquiescent at worst, however. Cabinet members generally but not uniformly accepted the pros-



pect of creating the world's second largest steel producer. Officials of MITI and the Economic Planning Agency positively endorsed the merger. For MITI, of course, the merger was highly favorable. Both firms were cooperative with MITI and were sympathetic to the Ministry's efforts at investment moderation. Besides forming a single large voice of restraint, the merger relieved in part the physical problem of capacity indivisibility by eliminating one applicant. The FTC quietly indicated its willingness to consider the merger. The only unequivocally negative response was that of a group of ninety academic economists who feared reduced competition and higher prices.

Elements of government favoring the merger began to line up support in anticipation of FTC action against the proposal. Prime Minister Sato publically asked for the support of related Ministries and of his Party officials. In the summer of 1968, a committee of the Industrial Structure Council prepared a timely report discussing the advantages of large industrial mergers. International competitiveness was the principle justification, a theme which prevails throughout MITI's administrative guidance to steel, auto, and computer industries in the late 1960's.

The Fair Trade Commission of Japan is approximately modeled after the United States Federal Trade Commission. It is a quasi-judicial body independent of the Diet except for budget and appointment of its five permanent commissioners. It is the FTC's jurisdiction to hear and decide alleged violations of Japan's Anti-Monopoly Act. Appeal procedures of course are available. Although the Commission's general disposition was to oppose anti-competitive actions, its position toward mergers and joint activities for the purpose of industry rationalization other than those legislatively exempted from Anti-Monopoly jurisdiction had not been clearly articulated at the time of Yawata-Fuji.

MITI and FTC, then, were positioned in opposition to each other. A number of major mergers had been effected during the previous five years including Mitsubishi Heavy Industries in 1964 and Nissan-Prince in 1966. However, MITI viewed with suspicion the attitude of the FTC in interpreting the Anti-Monopoly Act and had periodically sought to undermine the Act and its enforcement mechanism. At the end of 1966, the Ministry and the Commission jointly prepared a memorandum of understanding expressing the willingness of the latter to be more permissive on merger and joint action matters, particularly those designed to strengthen the competitiveness of Japanese goods in world markets. MITI, on the other hand, agreed to avoid undermining the Anti-Monopoly Law and work toward industry rationalization within its framework. The memorandum however did little to eliminate uncertainty.

In an initial polling of the five commissioners, three were reasonably tolerant of the merger. The three were former officials of the Ministry of Finance, the Justice Ministry and MITI. The two remaining commissioners, including Chief Commissioner Seiichi Yamada, were opposed.

Yamada, who was to emerge as the central character in the ensuing drama, was a former Bank of Japan official and had been appointed to the Commission in 1967. As an advocate of enforcing competitive behavior within Japanese industry, he reflected the positions of the leftist minority parties of the Diet and perhaps a majority of influential academic economists.

The FTC's specific objections to the proposed merger were based on market share. The Commission had established a 30% market share criterion in evaluating the anti-competitive effects, hence the nine product areas from tin plate to heavy rails, in which Yawata and Fuji had a combined share in excess of 30%, were grounds for disallowing the merger. The substantial issue of the case then became market share. The FTC would argue excessive share, and Yawata and Fuji would reply that shares of their non-controlled subsidiaries were irrelevant and that substitute non-steel products were available, making steel market shares irrelevant. The Commission contended that high shares led to monopoly pricing and relaxed efficiency while the steelmakers argued that end-users were competent buyers and would force the steel markets to remain competitive.

After the initial rounds of argument in informal communication, the FTC allowed Yawata and Fuji to present an adjustment strategy, that is a plan to dispose of those operations which accounted for excessive market shares. MITI urged the two companies to comply, for most of the nine offending product lines were insignificant to total corporate sales. The two companies responded with only token concessions and subsequently presented to the FTC a merger plan which was found unacceptable. On this note the Commission closed the informal negotiations, and the two companies responded quickly with a formal notice to proceed with the merger. The FTC in reply threatened the issuance of an injunction.

In the face of an impending injunction, the presidents of the two steelmakers, the chief of MITI's Heavy Industry Bureau, a director of the Industrial Bank of Japan, and legal counsel met to reconsider the strategy. MITI argued withdrawal of the merger proposal and development of a new plan while the steel producers pressed for a formal hearing. The Industrial Bank of Japan, which is today Nippon Steel's largest shareholder and major creditor, supported moving toward a hearing. This course of action prevailed, and the hearing began in June 1969.

The hearing proceedings were characterized by the steelmakers' offers of market share liquidation in non-critical areas and convincing defense of their residual position on the merger. As the hearing progressed, the efforts of the government and business communities to support the merger grew. MITI officially documented the factual arguments of the producers and appeared as a supporting witness. The Industrial Bank of Japan's officials met with the commissioners to informally negotiate the issues of

market share levels and divestiture. The Cabinet issued a formal statement supporting consolidation of the industry.

As the hearing proceeded, the severe differences were successfully negotiated and the steelmakers' proposal gained credence. In October, counsel for Yawata suggested that mutual accommodation be pursued, meaning that the companies would formally recognize the accusations against them and submit a remedial plan to the Commission for acceptance. Increasingly, the commissioners had accepted the concept of merger; accommodation, despite Yamada's sustained opposition, was the opinion of the Commission. Formal proceedings were suspended and actual accommodation was confirmed on October 30. Nippon Steel was created. On the following day, Yamada submitted his resignation to the Prime Minister.

In retrospect, the merger does not appear exceptionally constructive. No ascertainable efficiencies of scale have emerged. The capacity regulation problem has not been measurably eased. The producer meetings at the Iron and Steel Federation were resumed in 1969 as expansion plans exceeded foreseeable demand outlets. During the 1970 discussions of five-year projected capital budgets, the sum of the individual producers' 1975 capacity targets was upwards of 175 million tons, a clearly unrealistic figure from the point of view of both demand and financial resources. The merger only served to consolidate two conservative producers. The impact on the other producers, at least Sumitomo and Kawasaki who did not oppose the merger, may have been counter-productive in stimulating continued aggressive expansion.

## **Specific Occasions of Government-Industry Cooperation**

**Voluntary Export Restraint.**—In June of 1968, the rapidly rising level of steel imports was becoming a serious issue in the United States. Congressional hearings in Washington were underway on a number of protectionist measures, and officials in Japan were concerned. While a representative of the Japan Steel Exporters Association was testifying against steel import quotas at a Washington hearing, the leaders of Japan's steel industry and MITI were conferring on strategy.

MITI was not persuaded that U.S. quotas were imminent and advised a wait and see policy. The industry, led by Mr. Inayama, president of Yawata Iron and Steel and then head of the Steel Exporters Association, was more concerned. The large steel companies exported roughly one-quarter of total production, of which one-third came to the United States. The American market for Japanese steel was both lucrative and rapidly growing, and Inayama was willing to compromise in order to protect it. Inayama suggested the voluntary quota idea to MITI at this time, but the Ministry regarded the idea as premature. In contrast to its initiative in



mobilizing the textile industry to adopt voluntary quotas earlier, the Heavy Industries Bureau was reluctant to act in the case of steel.

The bureaucracy's position at this time probably derived from, on the one hand, its awareness that the U.S. legislative system normally resists protectionist measures at least for a time and, on the other, its reluctance to establish the precedent of voluntary export quotas in high growth product areas. It must have been apparent to MITI that voluntary export quotas afforded the United States a more desirable form of protection permitting enforcement to be shifted to the exporter and thus avoiding the imposition of formal import barriers. In 1968, auto and color television exports to the United States were just beginning to take off, and MITI did not want Japan's steel industry to offer the country's largest single export market a major weapon.

The steel producers, however, had a different perspective. U.S. markets were lucrative, and as the relative cost and productivity positions continued to shift in Japan's favor, exports would probably become increasingly profitable. Given their competitive advantage, Japanese manufacturers sought to limit exports and raise prices rather than expand quantity by softening prices. (U.S. steelmakers reacted to Japanese market share, not profitability.) In fact, the Japanese have done under the quotas exactly that: enrich their fixed share of the U.S. market with high margin grades.

The industry, then, under Mr. Inayama's initiative, developed a voluntary export plan which was communicated to the United States' Department of State in July. Some disagreement among producers existed early in the discussions but was resolved as Inayama persuaded them that voluntary quotas were the only alternative to U.S. quotas. Yawata and Fuji, as the industry statesmen and staffed at executive levels with several former MITI officials, led the industry's efforts. The Ministry played no major role. After the terms of the first Japanese offer were rejected, primarily because permissible export tonnage growth (7%) was too high, a compromise was negotiated and announced in January of 1969. Japan was allocated 41% of the import market and was permitted 5% growth for three years. The agreement is in the form of a letter from Inayama to the U.S. Secretary of State.

MITI plays no direct role in enforcement of the voluntary quota. The industry's coordinating mechanism is a monthly meeting of sales managers of the major steel producers. At an early date, the allocation criteria were determined. Among them were two notable provisions: control should be maintained by decreasing the export quantity of ordinary carbon steel by the major nine producers, and the export of wire products and special steel products should not be decreased. The strategy for enriching the fixed import market share was apparent at this time.

The producers' voluntary export control procedure was legally justified under Japan's Export-Import Transaction Law of 1952. The act reads:



Exporters may enter into an agreement with respect to price, quantity, grade, design, and other items in the export business of a designated category of goods to be exported to a specified destination by reporting to the Minister of International Trade and Industry . . .

The act goes on to give MITI authority to alter or suspend the agreement if the agreement cannot effectively function or if it fails to serve legitimate interests.

The producers' agreement itself carries no specific penalties to the violator. Fines are stipulated but in no specific amount. The absence of carefully defined penalties appears characteristic of Japanese production cartels and industry export agreements. Observance, however, has not been a problem. Until fairly recently, export quota allocations were set separately from domestic capacity and, on specific items, production controls.

**Raw Material Acquisition.**—Japan's paucity of iron ore and coal deposits forced the steel industry at an early date to search out long-term overseas sources of supply. Unlike the nation's paper and pulp industry, which faced similar shortages but which was not aggressive in exploration and relied heavily on direct government assistance in developing sources of supply, the steel industry took the initiative in establishing ore and coal sources. The government's role has been unmistakably supportive in a variety of ways, but has taken little responsibility for resource development. Roughly four-fifths of Japan's resource consumption in the making of steel is from long-term contract arrangements made by the steel industry itself.

The government's fundamental assistance has been financial. First there is direct financing of imports from government banks, primarily from the Export-Import Bank and the Overseas Economic Cooperation Fund. These institutions provided the assurance of long-term financing necessary in order to enter into supply agreements with overseas mining operations many of whose total output, and hence total investment, was for Japan. In addition to providing a long-term source of funds, the government designates iron ore and coal as priority import categories and ensures that funds are allocated to them. Currently, with Japan's surplus of foreign exchange, this designation is irrelevant, but for twenty postwar years this was a highly important provision to steel industry management.

In addition to financing imports, the government has assisted steelmakers in undertaking direct overseas resource development investment. Special sources of funds are designated by the Ministry of Finance in its annual budget in accordance with a standing policy to favor overseas investment for this purpose. Once again this provision is less critical now that the Ministry has relaxed its control of capital exports. During the 1950's and 1960's when Japan's currently productive resource development projects were undertaken, however, capital exports of scarce foreign

exchange were authorized first for ore, coal, and petroleum exploration and mining ventures. Resource development accounted for 30% of total cumulative Japanese foreign investment through 1970.

It is not merely the formal availability of loan funds for development which impresses, but the priority which the government has given this type of investment and the diverse support which has resulted. On several occasions the Ministry has quickly directed funds to a Japanese development coordinator, usually a large trading company. These funds have made a critical difference to success or failure. Similarly, the financing for the Japanese equipment and technology export which usually attends the overseas development project can be expedited. Another agency acts as guarantor for development venture borrowers in the private financial sector. MITI has dispatched to Canada and Australia teams of exploration experts to investigate possible coal development sites and to advise the developer. The Japan Overseas Development Corporation, a public corporation and a counterpart to the Japan Petroleum Development Corporation, assists in the organization and financing of development projects abroad. The commitment of government to bringing foreign sources of ore and coal supply on stream has been unequivocally demonstrated. The interests of business and government are exceptionally close in this area.

A third form of government financial assistance has been tax incentives and insurance against development losses. A contingency reserve for possible losses and thorough development loss insurance facilities are available to overseas ventures. The impact of these is slight, particularly when compared to depletion allowances.

Beyond these financial and organizational facilities, the Japanese government takes little direct role in developing overseas sources. The government is supporting basic geological exploration in prospective supply areas. In addition, public funds have established a resource development college to provide professional training in exploration and mining. However, the state has not directly invested in resource development on a significant scale nor does it direct the efforts of manufacturers and trading companies in exploration or mining. But it does offer ubiquitous support.

Some elements of the business community urge the government to take a more direct role. The Industrial Problem Forum, a meeting of distinguished business leaders, has recently proposed that a large semi-governmental corporation be established to coordinate and directly invest in development projects in all of Japan's critical basic materials. The corporation would be quasi-utility and permit a single organizational focus on the resource supply question. Most observers, however, seem to view the present institutions of government, although not necessarily their levels of effort, as adequate.

**1965 Crisis in Specialty Steel Sector.**—The recession of 1964–65 triggered a crisis in the specialty producer sector of the Japanese steel

industry. The overinvestment and increase in the number of producers during the rapid growth of the early 1960's had exposed the industry to devastating financial consequences when the economy turned sharply down in response to the counter-inflationary monetary policies of 1964. MITI established production, then price cartels to help the producers survive the decline and, in addition, took the opportunity to press for a restructuring of the industry.

Specialty steel production—stainless, tool, etc.—grew rapidly from 1960 to 1965, but capacity had grown even faster. By 1965, significant overinvestment had occurred. The major source of overinvestment was the entry of additional carbon steel producers into the stainless, tool, and structural alloy fields. In structural alloy, for example, the share of production accounted for by carbon steel producers rose from 25 percent in 1960 to 55 percent in 1965. The assets-to-sales ratio of the industry rose from 1.0 in 1960 to 1.4 in 1965. As borrowing increased to finance the new capacity, the aggregate debt-equity ratio of the specialty producers rose from 2.0 in 1960 to 4.3 in 1965. The industry was clearly vulnerable.

In February 1964, the Japanese government initiated a deflationary monetary policy. As economic growth began to slow, machinery and auto producers reduced their steel orders. Specialty steel producers cut prices sharply to retain market share and plant operating levels. Auto producers, the biggest user of stainless, demanded a price cut in order to gain a substantial cost advantage over foreign producers as passenger car import quotas were being lifted. While the economy's growth slowed from over 10 percent to 5 percent in one year, specialty steel production actually declined from 1964 to 1965.

The industry and MITI responded quickly. MITI suggested guidelines for voluntary production cutbacks as early as April 1964. Demand fell faster than production, however, and dramatic production cuts of 10 to 15 percent were necessary by the end of 1964 from previous year levels. A formal production cartel was organized by MITI in January 1965 for structural alloy steel. In March, a more stringent measure, a price cartel, followed as prices continued to deteriorate. March was also marked by the financial collapse of Sanyo Specialty Steel, the largest bankruptcy of the postwar period. In December, a production cartel for stainless and bearing steel was organized by MITI.

The economy recovered in 1966, and by September all cartels were lifted. However, MITI took the initiative for reorganization at this time. The Specialty Steel Policy Sub-Committee of the Ministry's powerful Industry Structure Deliberation Council was asked during the recession to consider and recommend a program for reform. In November 1965, the Sub-Committee issued a report calling for the industry and MITI to cooperate in rationalizing the specialty steel sector. The hard-hit manufac-



turers strongly favored the Sub-Committee's proposals, resulting in significant changes over the next five years.

The report called for efforts in three areas: vertical rationalization of production among carbon steel and specialty producers, specialization within steelmaking groups of particular products, and formal merger of competing or complementary producers.

The structure of the steel industry facilitated the vertical rationalization of production between affiliated steel producers. The major carbon steel producers entered the recession with a loosely-controlled group of specialty producing subsidiaries. Yawata and Fuji, the largest groups, accounted for nearly half of the total specialty steel production. Operations were not well integrated, however. The specialty producers usually produced their own billets and occasionally their own crude carbon ingots. Paralleling this backward integration of the specialty firms was the forward integration of the large blast-furnace producers of crude steel into electric furnace manufacture of stainless, tool, and structural products. MITI encouraged the blast furnace operators to take over the billet supply function, thus reducing the number of marginal billet operations and enabling specialty producers to correct their over-extended position.

In response, Fuji Iron Works established Tokai Specialty Steel, a joint venture among Fuji and its major specialty subsidiaries including Daido and Sanyo. Tokai receives ingots from Fuji's Nagoya plant and produces billets for all of the group's specialty affiliates. Yawata planned a similar joint venture, however, the Fuji-Yawata merger brought about its cancellation. Nippon Steel is presently adjusting the billet supply question among its eight major specialty producers.

Horizontal specialization of production within groups also resulted from the MITI guidelines. The Fuji group, for example, agreed to place all specialty wire manufacture in Daido, which received its billets from Tokai. Mitsubishi Steel integrated all its spring making production in its Fukagawa plant. Yawata established similar specialization in other areas.

No mergers resulted directly from the Sub-Committee's report. Several discussions are underway at present, particularly between members of the same group. Specialty steel mergers should be viewed as an extension of the rationalization process. As in the rationalization agreements, the government provided the cooperating steel companies with access to the Investment and Loan Program whereby low-interest borrowings were made available. The promise of low-cost and guaranteed debt of finance was extremely attractive during this period of liquidity crisis, and the necessity for rationalization became all too apparent. In fact, MITI's programs were really formalized expressions of what the producers would have sought to undertake independently. This of course contrasts sharply with MITI's experience in promoting consolidation in the auto industry. The economic climate was decisively different in the two cases.

One other dimension of government support was evident in the spe-



cialty steel crisis, and this was the financial rescue of major Japanese firms. Two major producers—Sanyo and Nippon Specialty—slid in bankruptcy in 1965. Under the Corporate Rehabilitation Act, the government sponsored the reorganization and refinancing of these two firms. MITI, the Ministry of Finance, The Bank of Japan, and the commercial banks all played important roles. In the case of Nippon Specialty Steel, the rehabilitation plan was drawn up in December 1966 by the major creditors and shareholders under the supervision of the Ministry of Finance. In short, the method of rehabilitation was to reduce by massive amounts the unsecured debt and paid-in capital without compensation to creditors and shareholders. Under the guidance of the Ministry of Finance, new shares were issued to creditors holding the cancelled debt instruments, mortgaged debt was frozen, and new management was installed. New debt was arranged through the intervention of The Bank of Japan.

Both companies were resuscitated, and both have regained reasonable operating health. The government's intention to ensure the continuity of major Japanese firms was much in evidence in these rationalization and reorganization efforts.

**Current Situation.**—The current situation among elements of government and the steel industry is a predictable extension of the historical relationship. MITI and the industry continue to confer on capacity, production, and export issues, and the consensus system retains its central position. The exercise of direct controls such as MITI's allocation of imported coking coal and the Ministry of Finance's strict control of foreign exchange lending to steel is less frequent but remains potentially stringent. (Coking coal imports were partially liberalized in October 1971.)

In June of 1971, the Heavy Industries Bureau obtained approval from the Industrial Structure Council of a new program to rationalize and modernize existing steel capacity. The plan, which was formulated with the assistance of the steelmakers, would make it mandatory to idle smaller, obsolescent furnaces as larger modern furnaces became operational. This plan is partially a response to the projected waning of steel demand growth in the intermediate term and partially an effort to retain Japan's position as the most competitive producer overall of steel internationally.

The FTC immediately announced its opposition to this plan, claiming that it is a government-authorized "production adjustment cartel running counter to the Anti-Monopoly Law." A negotiation followed, and after limited concessions from MITI, the FTC accepted the plan.

The FTC monitors producer behavior in prices and production levels as well. This past spring the Commission investigated Nippon Steel pricing behavior and its impact on other producers. In November of 1970, Nippon Steel first announced a 10% cut in crude steel output in an attempt to help recovery in steel prices. Other producers quickly followed

suit. This contrasted with patterns of the past when substantial disagreements among competing steelmakers arose as some used the situation to gain market share. This unusually cooperative attitude suggested to the Commission that prior consultations among producers alone without MITI's administrative guidance had transpired. Private collusion is not tolerated.

The major question facing the industry in 1971, however, is steel demand, both long- and short-run. Earlier estimates of a 150 million ton business by 1975—roughly a 50% increase over current levels—have become highly improbable as Japan's recovery from the current recession has failed to materialize. MITI's own revised estimates are lower than those of the aggressive firms. This gap in expectations, in light of the rising minimum efficient scale of integrated steel facilities, will again require MITI to perform its traditional reconciliation task.

The short-run implication of the 1971 recession has been over-production. The persistence of the downturn necessitated a 10 percent reduction in output through mid-year which was established by the industry on the basis of self-restraint. The New Economic Policy of the United States in the fall of 1971 prompted the industry to ask MITI to organize a "depression cartel" which would monitor production levels of individual manufacturers. MITI responded by organizing the cartel and negotiating approval of its operation with the Fair Trade Commission.

There are precedents for temporary, MITI-enforced production cartels. In both 1962 and 1965, selected products were cartelized in periods of weak demand. (The 1965 cartel and Sumitomo's resistance were described earlier.) The Anti-Monopoly Law permits such actions when the market price of any product has declined below production cost and rationalization actions by producers do not prove effective remedies. This provision reflects Japan's flexible attitude toward officially-sanctioned market organization and an awareness of the potentially destructive recession economics of high fixed cost operations and intense competition for market share.

#### **PROFILES OF JAPAN'S MAJOR STEEL PRODUCERS**

(Data for Year Ended March 31, 1971)

	<b>Nippon Steel</b>	<b>Nippon Kokan</b>	<b>Sumitomo Metal</b>	<b>Kawasaki Steel</b>	<b>Kobe Steel</b>
Corporate Sales <sup>1</sup>	3,602	1,631	1,281	1,144	1,090
Total Assets <sup>1</sup>	4,904	2,331	1,627	1,636	1,394
Profits after Tax <sup>1</sup>	72	31	26	39	25
Paid-in Capital <sup>1</sup>	637	212	230	248	212
Profit as % Sales	2.0%	1.9%	2.1%	3.5%	2.3%
Annual Growth (5-yr. average)	18.9%	22.0%	21.8%	20.2%	16.0%
Market Share	36%	14%	12%	12%	10%
Employees	82,046	42,102	31,525	37,834	32,747

<sup>1</sup> Value in thousands of dollars.



PENN STATE UNIVERSITY LIBRARIES



A000071288567